Appendix G

Post-Excavation Confirmatory Sampling Results and Information

318410

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
MB0001	ba4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0003	ba2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0004	ba3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0005	ba3	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0006	ba4	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0007	bb1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0008	bb2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0009	bb3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0010	bb4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0011	ba1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
B0001	ba4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0003	ba2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0004	ba3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0005	ba3	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0006	ba04	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0007	bb1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0008	bb2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0009	bb3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0010	bb4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0011	ba1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
MB0012	ba8	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0013	ba5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0014	ba6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0015	ba7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0016	ba7	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0017	ba8-QC	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0018	bb5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0019	bb6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0020	bb7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0021	bb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0022	Dupbb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
B0012	ba8	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0013	ba5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0014	ba6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0015	ba7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0016	ba7	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0017	ba8-QC	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0018	bb5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0019	bb6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0020	bb7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0021	bb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0022	Dupbb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
MB0023	ba9	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0024	ba10	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0025	ba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0026	ba11	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0027	ba11	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0028	ba12	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0029	Dupba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
B0023	ba9	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0024	ba10	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0025	ba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0026	ba11	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0027	ba11	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0028	ba12	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0029	Dupba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0033	C19	Grid C19 Wood Floor	5/20/2009	Other	DESA- Datachem	5/20/2009		6/17/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
B0034	C/D18	Grid C/D18 Soils @ 6 ft BG	5/20/2009	SO	DESA-Datachem	5/20/2009		6/17/2009	
B0035	E14	Grid E14 Soils @ 6 ft BG	5/20/2009	SO	DESA-Datachem	5/20/2009		6/17/2009	
MB0036	C19	Grid C19 Wood Floor	5/20/2009	Other	DESA - ChemTech	5/20/2009		6/17/2009	
MB0037	C/D18	Grid C/D18 Soils @ 6 ft BG	5/20/2009	SO	DESA - ChemTech	5/20/2009		6/17/2009	
MB0038	E14	Grid E14 Soils @ 6 ft BG	5/20/2009	SO	DESA - ChemTech	5/20/2009		6/17/2009	
B0042	B11	Grid B11 Test Pit 7 ft BG	5/21/2009	SO	DESA-Datachem	5/21/2009		6/17/2009	
B0043	C15	Grid C15 Test Pit 7.5 ft BG	5/21/2009	SO	DESA-Datachem	5/21/2009		6/17/2009	
MB0044	C15	Grid C15 Test Pit 7.5 ft BG	5/21/2009	SO	DESA - ChemTech	5/21/2009		6/17/2009	
MB0045	B11	Grid B11 Test Pit 7 ft BG	5/21/2009	SO	DESA - ChemTech	5/21/2009		6/17/2009	
B0046	B14	Grid B14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
B0048	C15	Grid C15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
B0049	D15	Grid D15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
B0050	C14	Grid C14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
MB0046	B14	Grid B14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
MB0047	C14	Grid C14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
MB0048	C15	Grid C15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
MB0049	D15	Grid D15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
B0051	A14	Grid A14 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA-Datachem	6/9/2009	6/30/2009	8/19/2009	
B0052	A15	Grid A15 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA-Datachem	6/9/2009	6/30/2009	8/19/2009	
MB0051	A14	Grid A14 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA - ChemTech	6/9/2009		8/19/2009	
MB0052	A15	Grid A15 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA - ChemTech	6/9/2009		8/19/2009	
B0054	B16	Grid B16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0055	B17	Grid B17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0056	C16	Grid C16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0057	C17	Grid C17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0058	C18	Grid C18 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0059	D16	Grid D16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0060	B16	Grid B16 DUP Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0062	B14	Grid B14 Confirmation Floor @ 2 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
MB0053	B14	Grid B14 Confirmation Floor @ 2 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0054	B16	Grid B16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0055	B17	Grid B17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0056	C16	Grid C16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0057	C17	Grid C17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0058	C18	Grid C18 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0059	D16	Grid D16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0060	B16	Grid B16 DUP Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
B0063	B16	Grid B16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0064	C15	Grid C15 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0065	D15/16	Grid BD15/16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0066	I20	Grid I16 LTTD Footprint @ 9-12" BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0067	J20	Grid I16 LTTD Footprint @ 0-6" BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
MB0063	B16	Grid B16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0064	C15	Grid C15 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0065	D15/16	Grid BD15/16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0066	I20	Grid I20 LTTD Footprint @ 9-12" BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0067	J20	Grid J20 LTTD Footprint @ 0-6" BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
B0069	I17	Grid I17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0070	J14a	Grid J14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0071	J14b	Grid J14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0072	J17	Grid J17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0073	K14a	Grid K14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0074	K14b	Grid K14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0075	X18	2 pt Composite from Suspected Lead @ 18-24" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
MB0069	I17	Grid I17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0070	J14a	Grid J14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0071	J14b	Grid J14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
MB0072	J17	Grid J17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0073	K14a	Grid K14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0074	K14b	Grid K14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0075	X18	2 pt Composite from Suspected Lead @ 18-24" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
C-18 SWN 0-4'	C-18	Concrete sidewall (north wall) sample in C-18 test pit 0-4' BG	7/20/2009	CONC	Mitkem	7/20/2009		7/24/2009	
C-18 SWN 4-8'	C-18	Concrete sidewall (north wall) sample in C-18 test pit 4-8' BG	7/20/2009	CONC	Mitkem	7/20/2009		7/24/2009	
C-1819 SWE	C-18/19	Sidewall sample along the C-18/19 border @ 12" BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWE 0-4'	C-18	Sidewall (east wall) sample in C-18 test pit @ 0-4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWE 4-8'	C-18	Sidewall (east wall) sample in C-18 test pit @ 4-8' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWS 0-4'	C-18	Sidewall (south wall) sample in C-18 test pit @ 0-4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWS 4-8'	C-18	Sidewall (south wall) sample in C-18 test pit @ 4-8' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWW 0-4'	C-18	Sidewall (west wall) sample in C-18 test pit @ 0-4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWW 4-8'	C-18	Sidewall (west wall) sample in C-18 test pit @ 4-8' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 FL 0-4'	C-18	Floor sample in C-18 test pit @ 4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWT	C-18	Sidewall sample along rail property @ 1' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 FL 2'	C-18	Floor sample in C-18 @ 2' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
MB0076	AC-12	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0077	AC-12	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0078	AC-15	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0079	AC-15	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0080	AC-6	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0081	AC-6	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0082	AC-9	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0083	AF-22	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0084	AF-25	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0085	AF-25	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0086	AF-28	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0087	AF-28	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0088	AF-31	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0089	AF-31	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0090	AF-22	Field duplicate for sample MB0083	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
B0076	AC-12	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0077	AC-12	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0078	AC-15	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0079	AC-15	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0080	AC-6	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0081	AC-6	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0082	AC-9	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0083	AF-22	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0084	AF-25	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0085	AF-25	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0086	AF-28	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0087	AF-28	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0088	AF-31	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0089	AF-31	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0090	AF-22	Field duplicate for sample MB0083	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
MB0091	AD-22	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0092	AD-22	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0093	AD-25	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0094	AD-25	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0095	AD-28	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0096	AD-28	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0097	AD-31	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0098	AD-31	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0099	AD-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A0	AD-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A1	AD-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A2	AD-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A3	AF-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
MB00A4	AF-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A5	AF-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A6	AF-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A7	AF-37	Field duplicate for sample MB00A5	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A8	AD-28	Field duplicate for sample MB0095	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A9	I-26	Northeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00B0	I-25	Northwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00B1	J-26	Southeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00B2	J-25	Southwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
B0091	AD-22	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0092	AD-22	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0093	AD-25	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0094	AD-25	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0095	AD-28	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0096	AD-28	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0097	AD-31	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0098	AD-31	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0099	AD-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A0	AD-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A1	AD-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A2	AD-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A3	AF-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A4	AF-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A5	AF-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A6	AF-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A7	AF-37	Field duplicate for sample MB00A5	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A8	AD-28	Field duplicate for sample MB0095	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A9	I-26	Northeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00B0	I-25	Northwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00B1	J-26	Southeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00B2	J-25	Southwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
C-16 SW N	C-16	Sidewall (north wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
C-16 SW E	C-16	Sidewall (east wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
C-16 SW W	C-16	Sidewall (west wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
C-16 SW S	C-16	Sidewall (south wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-15 FL	B-15	Floor sample @ 3' BG. ~1' of wood floor was removed, the soil beneath was samplec	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW N	B-16	Sidewall (north wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW E	B-16	Sidewall (east wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW W	B-16	Sidewall (west wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW S	B-16	Sidewall (south wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
CD-C18-3-NW FV	C-18	Sidewall sample along rail property @ 2' BG	7/29/2009	SO	Mitkem	7/29/2009	8/4/2009	8/12/2009	
CD-C18-2-WW 4-8' TP FV	C-18	Sidewall (west wall) sample in C-18 test pit @ 4-8' BG.	7/29/2009	SO	Mitkem	7/29/2009	8/4/2009	8/12/2009	
CD-C18-4-NW FV	C-18	Sidewall sample along rail property @ 2' BG	8/5/2009	SO	Mitkem	8/4/2009	8/10/2009	8/27/2009	
CD-P34-1-0-2' E	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24'	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-P34-1-0-2' N	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24'	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-P34-1-0-2' S	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24'	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-P34-1-0-2' W	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24'	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-C18-5-NW	C-18	Sidewall sample along rail property @ 2' BG	8/27/2009	SO	Mitkem	8/27/2009	9/2/2009	9/15/2009	
CD-BF-ST-1	Off Site	Off site backfill sample for chemical and radiological analysi	9/2/2009	SO	Mitkem	9/2/2009		10/5/2009	
CD-BF-MX-1	Off Site	Off site backfill sample for chemical and radiological analysi	9/2/2009	SO	Mitkem	9/2/2009		10/5/2009	
CD-Y9-1-SW	Y-9	Sidewall sample along New Market Extension @ 1' BG	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
CD-Y10-1-SW	Y-10	Sidewall sample along New Market Extension @ 1' BG	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
CD-Y11-1-SW	Y-11	Sidewall sample along New Market Extension @ 1' BG	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
DUP090309	Y-9	Field duplicate of CD-Y9-1-SW	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
CD-Z11-1-WW	Z-11	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AA11-1-WW	AA-11	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB11-1-WW	AB-11	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AC12-1-SW	AC-12	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AC13-1-SW	AC-13	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB14-1-SW	AB-14	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB15-1-SW	AB-15	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-AA15-1-SW	AA-15	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AA16-1-WW	AA-16	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB17-1-WW	AB-17	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
DUP 091009	AB-11	Field duplicate of CD-AB11-1-WW	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
DUP2 091009	AA-15	Field duplicate of CD-AA15-1-SW	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AC17-1-WW	AC-17	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC18-1-SW	AC-18	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC19-1-SW	AC-19	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC20-1-WW	AC-20	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC20-1-EW	AC-20	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AB20-1-EW	AB-20	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-WC-X18-1	X-18	Sample taken post Maectite treatment	9/16/2009	SO	Mitkem	9/16/2009	9/22/2009	10/5/2009	
CD-AB18-1-FL	AB-18	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB19-1-FL	AB-19	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AA19-1-FL	AA-19	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB20-1-FL	AB-20	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC20-1-FL	AC-20	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC13-2-SW	AC-13	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC14-1-SW	AC-14	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC15-1-SW	AC-15	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB16-1-SW	AB-16	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
DUP091709	AB-18	Field duplicate sample of CD-AB18-1-FL	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB14-1-FL	AB-14	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AB13-1-FL	AB-13	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AC13-1-FL	AC-13	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AA13-1-FL	AA-13	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AB12-1-FL	AB-12	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
DUP1092109	AB-13	Field duplicate sample of CD-AB13-1-FL	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
DUP2092109	AC-13	Field duplicate sample of CD-AC13-1-FL	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AB15-1-FL	AB-15	Floor sample along New Market Extension @ 2'BG	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
CD-AA17-1-FL	AA-17	Floor sample along New Market Extension @ 2'BG	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
CD-AA18-1-FL	AA-18	Floor sample along New Market Extension @ 2'BG	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
DUP092209	AA-18	Field duplicate sample of CD-AA18-1-FL	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
CD-WC-ASPH-1		Waste characterization of ashpalt stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-ASPH-2		Waste characterization of ashpalt stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-1		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-2		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-3		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-4		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
DUP092309		Field duplicated of sample CD-WC-DEB-4	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-MPIDRUM-1		Composite sample from MPI drums #7-16 for Pb only analysis	9/23/2009	SO	Mitkem	9/23/2009	9/28/2009	10/20/2009	
CD-AA12-1-FL	AA-12	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AA14-1-FL	AA-14	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AA15-1-FL	AA-15	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AA16-1-FL	AA-16	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
DUP092409	AA-15	Field duplicate sample of CD-AA16-1-FL	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AC9-1-SW	AC-9	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AC10-1-SW	AC-10	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AC11-1-SW	AC-11	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA9-1-NW	AA-9	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA10-1-NW	AA-10	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB9-1-WW	AB-9	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB9-1-FL	AB-9	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA10-1-FL	AA-10	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB10-1-FL	AB-10	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB11-1-FL	AB-11	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA11-1-FL	AA-11	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-Z12-1-FL	Z-12	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-Y12-1-FL	Y-12	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
DUP1092809	AA-10	Field duplicate sample of CD-AA10-1-NW	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
DUP2092809	AB-9	Field duplicate sample of CD-AB9-1-FL	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-Z13-1-FL	Z-13	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-Z14-1-FL	Z-14	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-Y13-1-FL	Y-13	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-Y14-1-FL	Y-14	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-X9-1-WW	X-9	Sidewall sample along New Market Extension @ 1' BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-W9-1-WW	W-9	Sidewall sample along New Market Extension @ 1' BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
DUP092909	Y-13	Field duplicate sample of CD-AB9-1-FL	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-V10-1-WW	V-10	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-U11-1-WW	U-11	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-T11-1-WW	T-11	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-S11-1-WW	S-11	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-S12-1-WW	S-12	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-R12-1-WW	R-12	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-AB16-1-FL	AB-16	Floor sample along New Market Extension @ 2'BG	9/30/2009	SO	Mitkem	9/30/2009	10/1/2009	10/23/2009	
DUP093009	T-11	Field duplicate sample of CD-T11-1-WW	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-Y15-1-FL	Y-15	Floor sample along New Market Extension @ 2'BG	10/1/2009	SO	Mitkem	10/1/2009	10/7/2009	10/23/2009	
CD-Z15-1-FL	Z-15	Floor sample along New Market Extension @ 2'BG	10/1/2009	SO	Mitkem	10/1/2009	10/7/2009	10/23/2009	
CD-Z16-1-FL	Z-16	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-Z17-1-FL	Z-17	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-Y18-1-FL	Y-18	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-Y19-1-FL	Y-19	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
DUP100509	Z-16	Field duplicate sample of CD-Z16-1-FL	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-AA19-1-NW	AA-19	Sidewall sample along New Market Extension @ 1' BG	10/7/2009	SO	Mitkem	10/7/2009	10/14/2009	10/27/2009	
CD-AA20-1-NW	AA-20	Sidewall sample along New Market Extension @ 1' BG	10/7/2009	SO	Mitkem	10/7/2009	10/14/2009	10/27/2009	
CD-Y16-1-FL	Y-16	Floor sample along New Market Extension @ 2'BG	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
CD-Y17-1-FL	Y-17	Floor sample along New Market Extension @ 2'BG	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
CD-Z19-1-NW	Z-19	Sidewall sample along New Market Extension @ 1' BG	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
DUP100809	Y-16	Field duplicate sample of CD-Y16-1-FL	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
CD-V12-1-FL	V-12	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W12-1-FL	W-12	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-X12-1-FL	X-12	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W11-1-FL	W-11	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-X11-1-FL	X-11	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W10-1-FL	W-10	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-X10-1-FL	X-10	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W9-1-FL	W-9	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
DUP101209	W-9	Field duplicate sample of CD-W9-1-FL	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-Z18-1-FL	Z-18	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-V13-1-FL	V-13	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-W13-1-FL	W-13	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-X13-1-FL	X-13	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-X14-1-FL	X-14	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
DUP101309	X-14	Field duplicate sample of CD-X14-1-FL	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-WC-CLST-1-N		Waste characterization of clean stockpile	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-WC-CLST-1-S		Waste characterization of clean stockpile	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-W14-1-FL	W-14	Floor sample along New Market Extension @ 2'BG	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-W15-1-FL	W-15	Floor sample along New Market Extension @ 2'BG	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-X15-1-FL	X-15	Floor sample along New Market Extension @ 2'BG	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-AG21-0-6"	AG-21	Waste characterization along Spicer Avenue at 0-6" Refusal at 1'.	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-AG22-0-6"	AG-22	Waste characterization along Spicer Avenue at 0-6" Refusal at 1'.	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-W16-1-FL	W-16	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-W17-1-FL	W-17	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-X16-1-FL	X-16	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-X17-1-FL	X-17	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-WC-SCDEB-1		Waste characterization of screened debris stockpile.	10/15/2009	SO	Mitkem	10/15/2009		11/10/2009	
CD-WC-MAEC-1		Waste characterization of Maectite treated material.	10/15/2009	SO	Mitkem	10/15/2009		11/10/2009	
CD-V11-1-FL	V-11	Floor sample along New Market Extension @ 2'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W13-1-WW	W-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W13-1-NW	W-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W13-2-FL	W-13	Floor re-sample due to PCB failure along New Market Extension @ 4'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-1-WW	X-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-1-EW	X-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-1-SW	X-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-2-FL	X-13	Floor re-sample due to PCB failure along New Market Extension @ 4'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-1-SW	W-14	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-1-EW	W-14	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-1-NW	W-14	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-2-FL	W-14	Floor re-sample due to PCB failure along New Market Extension @ 4'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
DUP102109	V-11	Field duplicate sample of CD-V11-1-FL	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
DUP2102109	W-13	Field duplicate sample of CD-W13-1-WW	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-3-FL	W-14	Floor re-sample due to PCB failure along New Market Extension @ 6'BG	10/27/2009	SO	Mitkem	10/27/2009	10/30/2009	12/3/2009	
CD-W14-2-SW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 3' BG	10/27/2009	SO	Mitkem	10/27/2009	10/30/2009	12/3/2009	
CD-W14-1-WW	W-14	Sidewall sample along New Market Extension @ 5' BG	10/27/2009	SO	Mitkem	10/27/2009	10/30/2009	12/3/2009	
CD-WC-CLASPH-1		Waste characterization of anticipated clean asphalt stockpile	10/28/2009	SO	Mitkem	10/28/2009		11/16/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-CLST-2-N		Composite sample from overburden stockpile, north	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-3-N		Composite sample from overburden stockpile, north	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-2-S		Composite sample from overburden stockpile, south	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-3-S		Composite sample from overburden stockpile, south	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-4-S		Composite sample from overburden stockpile, south	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-WC-STUMP-1		Waste characterization of tree debris stockpile	10/29/2009	SO	Mitkem	10/29/2009		11/30/2009	
CD-V9-1-FL	V-9	Floor sample along New Market Extension @ 2'BG	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-V9-1-NW	V-9	Sidewall sample along New Market Extension @ 1' BG	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
DUP1102909		Field duplicate of CD-CLST-2-N	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
DUP2102909		Field duplicate of CD-CLST-2-S	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-BF-MX-2		Off site backfill sample for chemical and radiological analysis	11/2/2009	SO	Mitkem	11/2/2009		11/19/2009	
CD-X13-3-FL	X-13	Floor re-sample due to PCB failure along New Market Extension @ 6'BG	11/3/2009	SO	Mitkem	11/3/2009	11/5/2009	12/3/2009	
CD-X13-1-NW	X-13	Sidewall sample along New Market Extension @ 5' BG	11/3/2009	SO	Mitkem	11/3/2009	11/5/2009	12/3/2009	
CD-WC-ASPH-1		Waste characterization of asphalt stockpile for Form U analysis	11/4/2009	SO	Mitkem	11/4/2009		11/16/2009	
CD-WC-ASPH-2		Waste characterization of asphalt stockpile for Form U analysis	11/4/2009	SO	Mitkem	11/4/2009		11/16/2009	
CD-W14-3-SW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/4/2009	SO	Mitkem	11/4/2009	11/9/2009	1/12/2010	
CD-W14-2-WW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/4/2009	SO	Mitkem	11/4/2009	11/9/2009	1/12/2010	
CD-CAPAC-1		Pure capacitors sent for PCB analysis	11/5/2009	SO	Mitkem	11/5/2009	11/10/2009	1/4/2010	
CD-W18-1-FL	W-18	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-W19-1-FL	W-19	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-X18-1-FL	X-18	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-X19-1-FL	X-19	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-W13-1-WW 4-6'	W-13	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-W14-4-SW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-X14-1-SW	X-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-X14-1-EW	X-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-AA20-1-FL	AA-20	Floor sample along New Market Extension @ 2'BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-AA20-1-EW	AA-20	Sidewall sample along New Market Extension @ 1' BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-Z20-1-FL	Z-20	Floor sample along New Market Extension @ 2'BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-Z20-1-EW	Z-20	Sidewall sample along New Market Extension @ 1' BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-Z19-1-FL	Z-19	Floor sample along New Market Extension @ 3'BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-X14-2-SW	X-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/16/2009	SO	Mitkem	11/16/2009	11/19/2009	1/5/2010	
CD-CAPTR-1		Treated (by LTTD unit) capacitors sent for PCB analysis	11/24/2009	SO	Mitkem	11/24/2009	12/3/2009	1/12/2010	
CD-WC-STUMP-2		Stump/tree debris pile in Southwest corner of CDA area	12/17/2009	SO	Mitkem	12/17/2009		1/7/2010	
CD-WC-SCDEB-2		Screen debris pile, sample #2 in the Northeast corner of the CDA area	12/17/2009	SO	Mitkem	12/17/2009		1/7/2010	
CD-POP-CDA		PCB only sample from outside stockpile for LTTD POP test	12/17/2009	SO	Mitkem	12/17/2009	12/21/2009	1/18/2010	
CD-POP-TENT		PCB only sample from inside SES tent for LTTD POP test	12/17/2009	SO	Mitkem	12/17/2009	12/21/2009	1/18/2010	
CD-AB42-1-FL	AB-42	Floor sample along southeastern property line @ 2'BG	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
CD-AA42-1-FL	AA-42	Floor sample along southeastern property line @ 2'BG	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
CD-AA43-1-FL	AA-43	Floor sample along southeastern property line @ 2'BG	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
DUP122209	AA-43	Field duplicate of CD-AA43-1-FL	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
CD-AA44-1-FL 2'	AA-44	Floor sample along southeastern property line @ 2'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Y42-1-FL 6'	Y-42	Floor sample along southeastern property line @ 6'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Y43-1-FL 6'	Y-43	Floor sample along southeastern property line @ 6'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Y43-1-SW 2-6'	Y-43	Sidewall sample along southeastern property line @ ~5'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Z42-1-FL 6'	Z-42	Floor sample along southeastern property line @ 6'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Z42-1-SW 2-6'	Z-42	Sidewall sample along southeastern property line @ ~5'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Z43-1-FL 2'	Z-43	Floor sample along southeastern property line @ 2'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
DUP010610	Z-43	Field duplicate of CD-Z43-1-FL 2'	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-AA40-1-FL 2'	AA-40	Floor sample along southeastern property line @ 2'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-AA41-1-FL 2'	AA-41	Floor sample along southeastern property line @ 2'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-AB40-1-FL 2'	AB-40	Floor sample along southeastern property line @ 2'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-Z40-1-FL 6'	Z-40	Floor sample along southeastern property line @ 6'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-Z41-1-FL 6'	Z-41	Floor sample along southeastern property line @ 6'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-Y41-1-FL 6'	Y-41	Floor sample along southeastern property line @ 6'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
DUP010710	AB-40	Field duplicate of CD-AB40-1-FL 2'	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-AA37-1-FL	AA-37	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AA38-1-FL	AA-38	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AA39-1-FL	AA-39	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB37-1-FL	AB-37	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB38-1-FL	AB-38	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB39-1-FL	AB-39	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB41-1-FL	AB-41	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
DUP011110	AB-41	Field duplicate of CD-AB41-1-FL	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AC39-1-FL	AC-39	Floor sample along southeastern property line @ 2'BG, QA sample taken here	1/12/2010	SO	Mitkem	1/12/2010	1/18/2010	1/28/2010	
CD-AC36-1-FL	AC-36	Floor sample along southeastern property line @ 2'BG, QA sample taken here	1/12/2010	SO	Mitkem	1/12/2010	1/18/2010	1/28/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-AB36-1-FL	AB-36	Floor sample along southeastern property line @ 2'BG. QA sample taken here	1/12/2010	SO	Mitkem	1/12/2010	1/18/2010	1/28/2010	
CD-AD37-1-SW	AD-37	Sidewall sample along southeastern property line @ ~1'BG. QA sample taken here	1/14/2010	SO	Mitkem	1/14/2010	1/19/2010	1/28/2010	
CD-AD39-1-SW	AD-39	Sidewall sample along southeastern property line @ ~1'BG. QA sample taken here	1/14/2010	SO	Mitkem	1/14/2010	1/19/2010	1/28/2010	
CD-AC37-1-FL	AC-37	Floor sample along southeastern property line @ 2'BG. QA sample taken here	1/14/2010	SO	Mitkem	1/14/2010	1/19/2010	1/28/2010	
CD-WC-SCDEB-3		Waste characterization sample for off-site disposal of screen debris	1/15/2010	SO	Mitkem	1/15/2010		2/3/2010	
CD-WC-SCDEB-4		Waste characterization sample for off-site disposal of screen debris	1/15/2010	SO	Mitkem	1/15/2010		2/3/2010	
CD-WC-SCDEB-5		Waste characterization sample for off-site disposal of screen debris	1/15/2010	SO	Mitkem	1/15/2010		2/3/2010	
CD-BF-MX-3		Sample of Maddox DGA material taken off-site from Weldon quarry	1/18/2010	SO	Mitkem	1/18/2010		2/16/2010	
CD-AA36-1-FL	AA-36	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-AA35-1-FL	AA-35	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-AB35-1-FL	AB-35	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-AC35-1-FL	AC-35	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
DUP011910	AA-36	Field duplicate of CD-AA36-1-FL	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-SHALE-PRE		Composite sample of crushed shale material prior to LTTD treatment	1/26/2010	SO	Mitkem	1/26/2010	2/1/2010	2/18/2010	
CD-W40-1-FL	W-40	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-W41-1-FL	W-41	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-X41-1-FL	X-41	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-X42-1-FL	X-42	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-Y39-1-FL	Y-39	Floor sample in southeastern excavation @ 6'BG.	2/4/2010	SO	Mitkem	2/4/2010	2/8/2010	2/23/2010	
CD-Y40-1-FL	Y-40	Floor sample in southeastern excavation @ 6'BG.	2/4/2010	SO	Mitkem	2/4/2010	2/8/2010	2/23/2010	
CD-Z373839-1-FL	Z-373839	Composite floor sample of partial grids in southeastern excavation @ 6'BG.	2/4/2010	SO	Mitkem	2/4/2010	2/8/2010	2/23/2010	
CD-W42-1-FL	W-42	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/8/2010	SO	Mitkem	2/8/2010	2/11/2010	3/1/2010	
CD-X40-1-FL	X-40	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/8/2010	SO	Mitkem	2/8/2010	2/11/2010	3/1/2010	
CD-Y38-1-FL	Y-38	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/8/2010	SO	Mitkem	2/8/2010	2/11/2010	3/1/2010	
CD-WC-SCDEB-6		Waste characterization sample for off-site disposal of screen debris	2/15/2010	SO	Mitkem	2/15/2010		3/2/2010	
CD-WC-SCDEB-7		Waste characterization sample for off-site disposal of screen debris	2/15/2010	SO	Mitkem	2/15/2010		3/2/2010	
WIPE-ALLU		Wipe sample taken from inside bucket of Allu	2/17/2010	WIPE	Mitkem	2/17/2010	2/22/2010	2/25/2010	
CD-Z37-1-SW	Z-37	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z38-1-SW	Z-38	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z39-1-SW	Z-39	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z40-1-SW	Z-40	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z41-1-SW	Z-41	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Y37-1-FL	Y-37	Floor sample in southeastern excavation @ 6'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Y36-1-FL	Y-36	Floor sample in southeastern excavation @ 6'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z36-1-FL	Z-36	Floor sample in southeastern excavation @ 6'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
DUP021810	Z-39	Field duplicate of sample CD-Z39-1-SW	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
DUP2021810	Z-37	Field duplicate of sample CD-Z37-1-SW	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-WC-Woodblock	T-40	Waste characterization sample for off-site disposal of wood block	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/3/2010	
CD-Y35-1-FL	Y-35	Floor sample in southeastern excavation @ 6'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
CD-Z35-1-FL	Z-35	Floor sample in southeastern excavation @ 6'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
CD-Z35-1-SW	Z-35	Sidewall sample in southeastern excavation @ 5'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
CD-Z36-1-SW	Z-36	Sidewall sample in southeastern excavation @ 5'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
WIPE-ALLU-2		Wipe sample taken from inside bucket of Allu	2/23/2010	WIPE	Mitkem	2/23/2010	2/26/2010	3/1/2010	
POP-TENT-022510		Material stockpiled in SES tent, believed to have high PCBs for LTTD POP test	2/25/2010	SO	Mitkem	2/25/2010	3/1/2010	3/16/2010	
WIPE-ALLU-3		Wipe sample taken from inside bucket of Allu	3/1/2010	WIPE	Mitkem	2/23/2010	2/26/2010	3/9/2010	
CD-WC-Woodpile-1		Waste characterization sample for off-site disposal of screen debris (with wood blocks`	3/1/2010	SO	Mitkem	3/1/2010		3/16/2010	
CD-WC-Woodpile-2		Waste characterization sample for off-site disposal of screen debris (with wood blocks`	3/1/2010	SO	Mitkem	3/1/2010		3/16/2010	
CD-WC-Cappile-1		Waste characterization sample for off-site disposal of debris (with capacitors`	3/1/2010	SO	Mitkem	3/1/2010		3/16/2010	
CD-X33-1-FL	X-33	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-X34-1-FL	X-34	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Y33-1-FL	Y-33	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Y34-1-FL	Y-34	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Z33-1-FL	Z-33	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Z34-1-FL	Z-34	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-AA3334-1-FL 2'	AA-3334	Floor sample in southeastern excavation @ 2'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-AA3334-1-FL 6'	AA-3334	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
DUP030410	AA-3334	Field duplicate of sample CD-AA3334-1-FL 2'	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
DUP2 030410	X-34	Field duplicate of sample CD-X34-1-FL	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-WC-SCDEB-8		Waste characterization sample for off-site disposal of screened debris (sample 8)	3/4/2010	SO	Mitkem	3/4/2010		3/23/2010	
CD-WC-SCDEB-9		Waste characterization sample for off-site disposal of screened debris (sample 9)	3/4/2010	SO	Mitkem	3/4/2010		3/23/2010	
CD-WC-SCDEB-8		Waste characterization sample for off-site disposal of screened debris	3/4/2010	SO	Mitkem	3/4/2010		4/14/2010	
CD-WC-SCDEB-9		Waste characterization sample for off-site disposal of screened debris	3/4/2010	SO	Mitkem	3/4/2010		4/14/2010	
CD-AA33-1-SW	AA-33	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-AA34-1-SW	AA-34	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-Z33-1-WW	Z-33	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-Y33-1-WW	Y-33	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
POP-CDA-030810		Composite of stockpile in CDA area. Material set aside for LTTD POP test	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-R13-1-FL	R-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-S13-1-FL	S-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-T13-1-FL	T-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-T12-1-FL	T-12	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-U13-1-FL	U-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-U12-1-FL	U-12	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
DUP030910	U-13	Field duplicate of sample CD-U13-1-FL	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-WC-OILSOIL-1		Waste characterization sample for off-site disposal of oil saturated soil	3/9/2010	SO	Mitkem	3/9/2010		4/13/2010	
CD-WC-OILSOIL-2		Waste characterization sample for off-site disposal of oil saturated soil	3/9/2010	SO	Mitkem	3/9/2010		4/13/2010	
CD-R14-1-FL	R-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-S14-1-FL	S-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-T14-1-FL	T-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-U14-1-FL	U-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-TU11-1-FL	T/U-11	Floor sample in southwestern excavation @ 2'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-S12-1-FL	S-12	Floor sample in southwestern excavation @ 2'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-V14-1-FL	V-14	Floor sample in southwestern excavation @ 6'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-R14-1-WW	R-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-S14-1-WW	S-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-T14-1-WW	T-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-U14-1-WW	U-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
DUP031110	T/U-11	Field duplicate of sample CD-TU11-1-FL	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-WC-OILSOIL-3		Waste characterization sample for off-site disposal of oil saturated soil	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Woodpile-3		Waste characterization sample for off-site disposal of screen debris (with wood blocks	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Woodpile-4		Waste characterization sample for off-site disposal of screen debris (with wood blocks	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Woodpile-5		Waste characterization sample for off-site disposal of screen debris (with wood blocks	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Cappile-2		Waste characterization sample for off-site disposal of debris (with capacitors	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-ASPH-3		Waste characterization sample for off-site disposal of site asphalt (sample #3)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-ASPH-4		Waste characterization sample for off-site disposal of site asphalt (sample #4)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
POP-1-031710A		Possible POP test material taken in area "A" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-2-031710A		Possible POP test material taken in area "A" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-3-031710A		Possible POP test material taken in area "A" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-1-031710B		Possible POP test material taken in area "B" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-2-031710B		Possible POP test material taken in area "B" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-3-031710B		Possible POP test material taken in area "B" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-1-031810D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/18/2010	SO	Mitkem	3/18/2010	3/23/2010	5/3/2010	
POP-2-031810D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/18/2010	SO	Mitkem	3/18/2010	3/23/2010	5/3/2010	
POP-3-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-4-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-5-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-6-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-7-032210D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/22/2010	SO	Mitkem	3/22/2010	3/25/2010	5/17/2010	
POP-8-032210D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/22/2010	SO	Mitkem	3/22/2010	3/25/2010	5/17/2010	
Baghouse-Dust		Dust sample from baghouse filter, sample obtained from LTTD pad during changeou	3/20/2010	SO	Mitkem	3/22/2010	3/25/2010	5/4/2010	
POP-1-032310E		Possible POP test material taken in area "E" Sample analyzed for PCB, TPH, Lead	3/23/2010	SO	Mitkem	3/23/2010	4/2/2010	5/4/2010	
POP-2-032310E		Possible POP test material taken in area "E" Sample analyzed for PCB, TPH, Lead	3/23/2010	SO	Mitkem	3/23/2010	4/2/2010	5/4/2010	
POP-3-032310E		Possible POP test material taken in area "E" Sample analyzed for PCB, TPH, Lead	3/23/2010	SO	Mitkem	3/23/2010	4/2/2010	5/4/2010	
CD-U13-2-FL	U-13	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure	3/25/2010	SO	Mitkem	3/25/2010	4/2/2010	5/17/2010	
CD-U12-2-FL	U-12	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure	3/25/2010	SO	Mitkem	3/25/2010	4/2/2010	5/17/2010	
CD-S13-2-FL	S-13	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to VOC failure	3/25/2010	SO	Mitkem	3/25/2010	4/2/2010	5/17/2010	
POP-E-033010		POP test material taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-MID-033010		POP test material taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-W-033010		POP test material taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-SHALE-W-033010		POP test shale taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-SHALE-E-033010		POP test shale taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
CD-S13-1-NW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-S13-1-WW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-S13-1-SW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U12-1-NW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U12-1-WW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U12-1-SW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-3-FL	U-13	Floor sample in southwestern excavation @ 6'BG. Add'l 2' excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-1-NW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-1-WW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-1-SW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U14-2-WW	U-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
DUP040110	S-13	Field duplicate of sample CD-S13-1-SW	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
DUP2040110	U-13	Field duplicate of sample CD-U13-1-NW	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-T39-1-FL	T-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-U39-1-FL	U-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-V39-1-FL	V-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-V38-1-FL	V-38	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-W39-1-FL	W-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-W38-1-FL	W-38	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-X39-1-FL	X-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-X38-1-FL	X-38	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
DUP040510	T-39	Field duplicate of sample CD-T39-1-FL	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-U12-2-NW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-U12-2-WW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-U13-2-NW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-S13-2-SW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-W18-2-FL	W-18	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to VOC failure	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-W18-1-SW	W-18	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/7/2010	SO	Mitkem	4/7/2010	4/13/2010	5/28/2010	
CD-S13-2-WW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure	4/7/2010	SO	Mitkem	4/7/2010	4/13/2010	5/28/2010	
CD-S14-TP8'	S-14	Sample of test pit at 8' in S14. Instructed by USEPA to sample to check for TCE	4/7/2010	SO	Mitkem	4/7/2010	4/13/2010	5/28/2010	
CD-S15-1-FL	S-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-S16-1-FL	S-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-S17-1-FL	S-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-S18-1-FL	S-18	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T15-1-FL	T-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T16-1-FL	T-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T17-1-FL	T-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T18-1-FL	T-18	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-U15-1-FL	U-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-U16-1-FL	U-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-U17-1-FL	U-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V15-1-FL	V-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V16-1-FL	V-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V17-1-FL	V-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
DUP040810	U-16	Field duplicate of sample CD-U16-1-FL	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V14-1-SW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-V14-1-WW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-V14-1-EW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-V14-2-FL	V-14	Floor sample in southwestern excavation @ 8'BG. Add'l 2' excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-U14-1-NW	U-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-U14-1-EW	U-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-U14-2-FL	U-14	Floor sample in southwestern excavation @ 8'BG. Add'l 2' excavated due to PCB failure	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
DUP040910	U-14	Field duplicate of sample CD-U14-1-EW	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-W38-2-FL	W-38	Floor sample in southwestern excavation @ 8'BG. Add'l 2' excavated due to PCB failure	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-W38-1-SW	W-38	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-W38-1-EW	W-38	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-W38-1-NW	W-38	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-T42-1-EW	T-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-T42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-U42-1-EW	U-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-U42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-V42-1-EW	V-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-V42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-W42-1-EW	W-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-W42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-X42-1-EW	X-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-X42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-Y42-1-EW	Y-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-Y42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-T40-1-FL	T-40	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-T41-1-FL	T-41	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U40-1-FL	U-40	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U41-1-FL	U-41	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-V40-1-FL	V-40	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-V41-1-FL	V-41	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-TU38-1-FL	TU-38	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-X353637-1-FL	X-353637	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-W18-3-FL	W-18	Floor sample in southwestern excavation @ 6'BG. Add'l 2' excavated due to PCB failure	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U12-2-WW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U13-2-NW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
DUP041410	T-40	Field duplicate of sample CD-T40-1-FL	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U18-1-FL	U-18	Floor sample in southwestern excavation @ 6'BG.	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
CD-V18-1-FL	V-18	Floor sample in southwestern excavation @ 6'BG.	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
CD-V19-1-FL	V-19	Floor sample in southwestern excavation @ 6'BG.	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
DUP041510		Field duplicate of sample CD-U18-1-FL	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
CD-V14-2-EW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
CD-R15-1-FL	R-15	Floor sample in southwestern excavation @ 6'BG.	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
CD-R16-1-FL	R-16	Floor sample in southwestern excavation @ 6'BG.	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
Baghouse-Dust-2		Dust sample from baghouse filter, sample obtained from LTTD pad during changeou	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
CD-WC-ASPH-5		Waste characterization sample for off-site disposal of site asphalt (sample #5)	4/21/2010	SO	Mitkem	4/21/2010		6/3/2010	
CD-WC-SCDEB-10		Waste characterization sample for off-site disposal of screened debris (sample #10)	4/21/2010	SO	Mitkem	4/21/2010		6/3/2010	
CD-O2-1-WW	O-2	Sidewall sample in small western excavation @ 1'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O3-1-FL	O-3	Floor sample in small western excavation @ 2'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O3-1-NW	O-3	Sidewall sample in small western excavation @ 1'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O4-1-FL	O-4	Floor sample in small western excavation @ 2'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O4-1-NW	O-4	Sidewall sample in small western excavation @ 1'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
DUP042210	O-3	Field duplicate of sample CD-O3-1-NW	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-P3-1-FL	P-3	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-P4-1-FL	P-4	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-Q3-1-FL	Q-3	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-Q4-1-FL	Q-4	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-R3-1-FL	R-3	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-R4-1-FL	R-4	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
DUP042310	P-3	Field duplicate of sample CD-P3-1-FL	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-P2-1-WW	P-2	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-Q2-1-WW	Q-2	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-Q5-1-EW	Q-5	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-R2-1-WW	R-2	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-R4-1-EW	R-4	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-S3-1-SW	S-3	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-S4-1-EW	S-4	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
DUP2042610	S-3	Field duplicate of sample CD-S3-1-SW	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-WC-ASPH-6		Waste characterization sample for off-site disposal of site asphalt (sample #6)	4/27/2010	SO	Mitkem	4/27/2010		5/11/2010	
CD-P5-1-FL	P-5	Floor sample in small western excavation @ 2'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-P5-1-NW	P-5	Sidewall sample in small western excavation @ 1'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-P6-1-EW	P-6	Sidewall sample in small western excavation @ 1'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-V14-3-EW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-T13-1-FL 6'	T-13	Floor sample in southwestern excavation @ 6'BG. USEPA directed excavation.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-T13-1-WW	T-13	Sidewall sample in southwestern excavation @ 5'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-S13-1-FL 6'	S-13	Floor sample in southwestern excavation @ 6'BG. USEPA directed excavation.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
DUP042810	P-6	Field duplicate of sample CD-P6-1-EW	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-U12-1-FL 6'	U-12	Floor sample in southwestern excavation @ 6'BG. USEPA directed excavation.	4/29/2010	SO	Mitkem	4/29/2010	5/10/2010	6/4/2010	
CD-P4-2-FL	P-4	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-NW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-EW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-WW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-SW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P6-1-FL	P-6	Floor sample in small western excavation @ 2'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-P7-1-FL	P-7	Floor sample in small western excavation @ 2'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-Q5-2-EW	Q-5	Sidewall sample in southwestern excavation @ 1'BG. Add'l excavated due to PCB failure	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-Q6-1-SW	Q-6	Sidewall sample in small western excavation @ 1'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-Q7-1-SW	Q-7	Sidewall sample in small western excavation @ 1'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-WC-DEB-5		Waste characterization sample for off-site disposal of debris pile (sample #5)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-6		Waste characterization sample for off-site disposal of debris pile (sample #6)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-7		Waste characterization sample for off-site disposal of debris pile (sample #7)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-8		Waste characterization sample for off-site disposal of debris pile (sample #8)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-9		Waste characterization sample for off-site disposal of debris pile (sample #9)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-10		Waste characterization sample for off-site disposal of debris pile (sample #10)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-11		Waste characterization sample for off-site disposal of debris pile (sample #11)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-12		Waste characterization sample for off-site disposal of debris pile (sample #12)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-13		Waste characterization sample for off-site disposal of debris pile (sample #13)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-14		Waste characterization sample for off-site disposal of debris pile (sample #14)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-S38	S-38	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-S39	S-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-S40	S-40	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-R39	R-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-Q39	Q-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-Q40	Q-40	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-P39	P-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-P40	P-40	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-Q4-2-FL	Q-4	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-Q4-1-EW	Q-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-Q4-1-WW	Q-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-Q4-1-SW	Q-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-U12-1-WW 7'	U-12	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-U12-1-NW 7'	U-12	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-T13-1-FL 8'	T-13	Floor sample in southwestern excavation @ 8'BG. USEPA directed excavation.	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-MI-PER	T-4	Pre-LTTD treatment sample of material with strong perfume odor	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
DUP2051010	U-12	Field duplicate of sample CD-U12-1-WW 7'	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-WC-O36	O-36	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-O37	O-37	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-O38	O-38	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-O39	O-39	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P36	P-36	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P37	P-37	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P38	P-38	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-Q36	Q-36	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-Q37	Q-37	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-Q38	Q-38	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-P32	P-32	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-P33	P-33	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-P34	P-34	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-P35	P-35	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O32	O-32	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O33	O-33	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O34	O-34	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O35	O-35	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-P34-1-0-4' E	P-34	Dioxin sample in grid P-34 East	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-P34-1-0-4' N	P-34	Dioxin sample in grid P-34 North	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-P34-1-0-4' W	P-34	Dioxin sample in grid P-34 West	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-P34-1-0-4' M	P-34	Dioxin sample in grid P-34 Middle	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-R17-1-FL	R-17	Floor sample in southwestern excavation @ 6'BG.	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/24/2010	
CD-R18-1-FL	R-18	Floor sample in southwestern excavation @ 6'BG.	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/24/2010	
CD-WC-ASPH-7		Waste characterization sample for off-site disposal of asphalt pile (pile #7)	5/17/2010	SO	Mitkem	5/17/2010		6/24/2010	
CD-WC-SCDEB-11		Waste characterization sample for off-site disposal of screened debris pile (pile #11)	5/21/2010	SO	Mitkem	5/21/2010		6/24/2010	
CD-AD39-1-SW	AD-39	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD39-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD40-1-SW	AD-40	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD40-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD41-1-SW	AD-41	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD41-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD42-1-SW	AD-42	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD42-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD43-1-SW	AD-43	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD43-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AB43-1-FL	AB-43	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC40-1-FL	AC-40	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC41-1-FL	AC-41	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC42-1-FL	AC-42	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC43-1-FL	AC-43	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AD39-1-FL	AD-39	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AD4041-1-FL	AD-4041	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AD4243-1-FL	AD-4243	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
DUP052510	AC-43	Field duplicate of sample CD-AC43-1-FL	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-WC-STUMP-3		Waste characterization sample for off-site disposal of tree and stump debris	5/25/2010	SO	Mitkem	5/25/2010		6/8/2010	
CD-S3-1-FL	S-3	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-S4-1-FL	S-4	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-S5-1-FL	S-5	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-T3-1-FL	T-3	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-T4-1-FL	T-4	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-T5-1-FL	T-5	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
DUP052610	S-3	Field duplicate of sample CD-S3-1-FL	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-S6-1-FL	S-6	Floor sample in southwestern excavation @ 2'BG.	5/27/2010	SO	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-S7-1-FL	S-7	Floor sample in southwestern excavation @ 2'BG.	5/27/2010	SO	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-S40-C	S-40	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O32-C	O-32	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O33-C	O-33	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O34-C	O-34	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O35-C	O-35	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O36-C	O-36	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O37-C	O-37	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P32-C	P-32	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P33-C	P-33	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P34-C	P-34	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P36-C	P-36	Waste characterization sample for off-site disposal of capacitors found in gric	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-WC-SCDEB-12		Waste characterization sample for off-site disposal of screened debris pile (pile #12)	6/8/2010	SO	Mitkem	6/8/2010		6/18/2010	
CD-WC-M-O39	O-39	Waste characterization sample for off-site disposal post Maectite treatment	6/8/2010	SO	Mitkem	6/8/2010	6/14/2010	6/30/2010	
CD-WC-M-P40	P-40	Waste characterization sample for off-site disposal post Maectite treatment	6/8/2010	SO	Mitkem	6/8/2010	6/14/2010	6/30/2010	
CD-WC-M-P38	P-38	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-P39	P-39	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-R39	R-39	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-R40	R-40	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-Q37	Q-37	Waste characterization sample for off-site disposal post Maectite treatment	6/14/2010	SO	Mitkem	6/14/2010	6/17/2010	7/1/2010	
CD-WC-M-Q38	Q-38	Waste characterization sample for off-site disposal post Maectite treatment	6/14/2010	SO	Mitkem	6/14/2010	6/17/2010	7/1/2010	
CD-WC-M-2-P38	P-38	Waste characterization sample for off-site disposal post Maectite re-treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-M-2-P39	P-39	Waste characterization sample for off-site disposal post Maectite re-treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-M-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-M-Cappile1		Waste characterization sample for off-site disposal post Maectite treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-ASPH-8		Waste characterization sample for off-site disposal of asphalt pile (pile #8)	6/15/2010	SO	Mitkem	6/15/2010		6/25/2010	
CD-WC-SCDEB-13		Waste characterization sample for off-site disposal of screened debris pile (pile #13)	6/22/2010	SO	Mitkem	6/22/2010		7/8/2010	
CD-I56-1-FL	I-5/I-6	Floor sample in southwestern excavation @ 2'BG. 1 sample taken for partial grids	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-J5-1-FL	J-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-J6-1-FL	J-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-K5-1-FL	K-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-K6-1-FL	K-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-L5-1-FL	L-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-L6-1-FL	L-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-M5-1-FL	M-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-M6-1-FL	M-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
DUP062410	K-5	Field duplicate of sample CD-K5-1-FL	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-I5-1-NW	I-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-I5-1-WW	I-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-I5-1-NW	I-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-I5-1-WW	I-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-J5-1-WW	J-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-J6-1-EW	J-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-L6-1-EW	L-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M5-1-WW	M-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M5-1-SW	M-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M6-1-EW	M-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M6-1-SW	M-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
DUP062810	M-6	Field duplicate of sample CD-M6-1-EW	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-WC-M-3-P38	P-38	Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-WC-M-3-P39	P-39	Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-WC-M-2-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-WC-M-2-Cappile1		Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-Q15-1-FL	Q-15	Floor sample in central excavation @ 6'BG.	7/6/2010	SO	Mitkem	7/6/2010	7/12/2010	7/28/2010	
CD-Q16-1-FL	Q-16	Floor sample in central excavation @ 6'BG.	7/6/2010	SO	Mitkem	7/6/2010	7/12/2010	7/28/2010	
CD-WC-M-3-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	7/6/2010	SO	Mitkem	7/6/2010	7/12/2010	7/16/2010	
CD-AG23-0-6"	AG-23	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG24-0-6"	AG-24	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG25-0-6"	AG-25	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG26-0-6"	AG-26	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG27-0-6"	AG-27	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG28-0-6"	AG-28	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG29-0-6"	AG-29	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG30-0-6"	AG-30	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG31-0-6"	AG-31	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG32-0-6"	AG-32	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG33-0-6"	AG-33	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG34-0-6"	AG-34	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG35-0-6"	AG-35	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG36-0-6"	AG-36	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG37-0-6"	AG-37	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG38-0-6"	AG-38	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
DUP070710	AG-28	Field duplicate of sample CD-AG28-0-6"	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
DUP2070710	AG-32	Field duplicate of sample CD-AG32-0-6"	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-Z43-1-EW	Z-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AA43-1-EW	AA-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AB43-1-EW	AB-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AC43-1-EW	AC-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AD43-1-EW	AD-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-WC-SCDEB-14		Waste characterization sample for off-site disposal of screened debris pile (pile #14	7/12/2010	SO	Mitkem	7/12/2010		7/26/2010	
CD-Q15-1-WW	Q-15	Sidewall sample in central excavation @ 5'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-Q17-1-FL	Q-17	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-Q18-1-FL	Q-18	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-Q19-1-FL	Q-19	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-R19-1-FL	R-19	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-WC-SCDEB-15		Waste characterization sample for off-site disposal of screened debris pile (pile #15	7/13/2010	SO	Mitkem	7/13/2010		7/26/2010	
CD-WC-ASPH-9		Waste characterization sample for off-site disposal of asphalt pile (pile #9	7/14/2010	SO	Mitkem	7/14/2010		7/27/2010	
CD-LK3-1-FL	L/K-3	Floor sample in western excavation @ 2'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-L3-1-SW	L-3	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-L4-1-SW	L-4	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-K3-1-NW	K-3	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-K4-1-NW	K-4	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
DUP071410	L-3	Field duplicate of sample CD-L3-1-SW	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-WC-TANK		Waste characterization sample for off-site disposal of tank pile	7/15/2010	SO	Mitkem	7/15/2010		7/27/2010	
CD-WC-M-4-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	7/22/2010	SO	Mitkem	7/22/2010	7/27/2010	8/10/2010	
CD-NWST-1		Overburden taken from northwest area of site, removed for regrading purposes	7/27/2010	SO	Mitkem	7/27/2010	7/30/2010	8/12/2010	
CD-NWST-2		Overburden taken from northwest area of site, removed for regrading purposes	7/27/2010	SO	Mitkem	7/27/2010	7/30/2010	8/12/2010	
DUP072710		Field duplicate of sample CD-NWST-2	7/27/2010	SO	Mitkem	7/27/2010	7/30/2010	8/12/2010	
CD-WC-M-5-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	7/30/2010	SO	Mitkem	7/31/2010	8/3/2010	8/12/2010	
CD-H5-1-FL	H-5	Floor sample @ 2'BG. Sample taken after fuel odors were reported in the area	8/3/2010	SO	Mitkem	8/3/2010	8/6/2010	8/24/2010	
CD-WC-SCDEB-15-2		Resample of screened debris pile #15 for PCBs only	8/3/2010	SO	Mitkem	8/3/2010	8/6/2010	8/24/2010	
CD-TS-MX-1	Offsite	Sample taken of off-site material to be used as on-site top soil	8/5/2010	SO	Mitkem	8/5/2010	8/10/2010	9/16/2010	
CD-SO-MX-1	Offsite	Sample taken of off-site material to be used as on-site soil	8/5/2010	SO	Mitkem	8/5/2010	8/10/2010	9/16/2010	
CD-WC-ASPH-10		Waste characterization sample for off-site disposal of asphalt (pile #10)	8/9/2010	SO	Mitkem	8/9/2010		8/23/2010	
CD-WC-SCDEB-16-1		Waste characterization sample for off-site disposal of screened debris (pile #16)	8/9/2010	SO	Mitkem	8/9/2010		8/23/2010	
CD-WC-SCDEB-16-2		Waste characterization sample for off-site disposal of screened debris (pile #16)	8/9/2010	SO	Mitkem	8/9/2010		8/23/2010	
CD-WC-SCDEB-17		Waste characterization sample for off-site disposal of screened debris (pile #17)	8/13/2010	SO	Mitkem	8/13/2010		8/31/2010	
CD-O8-1-FL		Floor sample @ 2'BG. Sample taken after fuel odors were reported in the area	8/13/2010	SO	Mitkem	8/13/2010	8/19/2010	8/31/2010	
CD-X20-1-WW	X-20	Sidewall sample in southern 14' excavation. Sample taken @ ~13' BG.	8/16/2010	SO	Mitkem	8/16/2010	8/20/2010	8/31/2010	
CD-Y20-1-WW	Y-20	Sidewall sample in southern 14' excavation. Sample taken @ ~13' BG.	8/16/2010	SO	Mitkem	8/16/2010	8/20/2010	8/31/2010	
CD-Y20-1-SW	Y-20	Sidewall sample in southern 14' excavation. Sample taken @ ~13' BG.	8/16/2010	SO	Mitkem	8/16/2010	8/20/2010	8/31/2010	
CD-AA28-1-FL	AA-28	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/18/2010	SO	Mitkem	8/18/2010	8/23/2010	9/20/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-AB27-1-FL	AB-27	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/18/2010	SO	Mitkem	8/18/2010	8/23/2010	9/20/2010	
CD-AB28-1-FL	AB-28	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/18/2010	SO	Mitkem	8/18/2010	8/23/2010	9/20/2010	
CD-AB27-1-SW	AB-27	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB27-1-WW	AB-27	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB28-1-SW	AB-28	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB29-1-FL	AB-29	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB29-1-SW	AB-29	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-FL 2'	AA-29	Floor sample @ 2'BG. Sample taken after capacitors and trash/debris pit was removed	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-FL 6'	AA-29	Floor sample @ 6'BG. Sample taken after capacitors and trash/debris pit was removed	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-NW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-EW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-WW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-SW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
DUP081910	AA-29	Field duplicate of sample CD-AA29-1-WW 5'	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA30-1-NW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA30-1-EW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA30-1-WW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA30-1-SW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA31-1-FL	AA-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB30-1-FL	AB-30	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB30-1-SW	AB-30	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB31-1-FL	AB-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB31-1-SW	AB-31	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA32-1-FL	AA-32	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB32-1-FL	AB-32	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB32-1-SW	AB-32	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB33-1-FL	AB-33	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB33-1-SW	AB-33	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB34-1-FL	AB-34	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/25/2010	SO	Mitkem	8/25/2010	8/30/2010	9/29/2010	
CD-AB34-1-SW	AB-34	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area	8/25/2010	SO	Mitkem	8/25/2010	8/30/2010	9/29/2010	
CD-WC-SCDEB-18		Waste characterization sample for off-site disposal of screened debris (pile #18)	8/27/2010	SO	Mitkem	8/28/2010		9/10/2010	
CD-Z29-1-FL	Z-29	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-FL 2'	Z-30	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-FL 8'	Z-30	Floor sample @ 8'BG. Sample taken after capacitors and trash/debris pit was removed	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-NW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-EW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-WW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-SW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z31-1-FL	Z-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
DUP083110	Z-31	Field duplicate of sample CD-Z31-1-FL	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Y29-1-FL	Y-29	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-Y30-1-FL	Y-30	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-Y31-1-FL	Y-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF23-1-FL	AF-23	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF23-1-SW	AF-23	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF24-1-FL	AF-24	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF24-1-SW	AF-24	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF25-1-FL	AF-25	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF25-1-SW	AF-25	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF26-1-FL	AF-26	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF26-1-SW	AF-26	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF27-1-FL	AF-27	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF27-1-SW	AF-27	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
DUP090110	Y-31	Field duplicate of sample CD-Y31-1-FL	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-WC-SCDEB-19-1		Waste characterization sample for off-site disposal of screened debris (pile #19)	9/1/2010	SO	Mitkem	9/1/2010		10/5/2010	
CD-WC-SCDEB-19-2		Waste characterization sample for off-site disposal of screened debris (pile #19)	9/1/2010	SO	Mitkem	9/1/2010		10/5/2010	
CD-AF28-1-FL	AF-28	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF28-1-SW	AF-28	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF29-1-FL	AF-29	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF29-1-SW	AF-29	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF30-1-FL	AF-30	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF30-1-SW	AF-30	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF31-1-FL	AF-31	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF31-1-SW	AF-31	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-AF32-1-FL	AF-32	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF32-1-SW	AF-32	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF33-1-FL	AF-33	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF33-1-SW	AF-33	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF23-2-FL	AF-23	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF24-2-FL	AF-24	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF25-2-FL	AF-25	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF26-2-FL	AF-26	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF27-2-FL	AF-27	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF28-2-FL	AF-28	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF29-2-FL	AF-29	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF30-2-FL	AF-30	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF31-2-FL	AF-31	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF32-2-FL	AF-32	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF33-2-FL	AF-33	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF34-1-FL	AF-34	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF35-1-FL	AF-35	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF36-1-FL	AF-36	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF37-1-FL	AF-37	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF38-1-FL	AF-38	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
DUP1091410	AF-25	Field duplicate of sample CD-AF25-2-FL	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF34-1-SW	AF-34	Sidewall sample @ 1'BG. QA sample CD-AF34-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF35-1-SW	AF-35	Sidewall sample @ 1'BG. QA sample CD-AF35-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF36-1-SW	AF-36	Sidewall sample @ 1'BG. QA sample CD-AF36-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF37-1-SW	AF-37	Sidewall sample @ 1'BG. QA sample CD-AF37-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF38-1-SW	AF-38	Sidewall sample @ 1'BG. QA sample CD-AF38-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF38-1-EW	AF-38	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/16/2010	SO	Mitkem	9/16/2010	9/21/2010	10/9/2010	
CD-W20-1-FL	W-20	Floor sample in south central excavation @ 14' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-X20-1-FL	X-20	Floor sample in south central excavation @ 14' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-Y20-1-FL	Y-20	Floor sample in south central excavation @ 14' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-W20-1-WW	W-20	Sidewall sample in south central excavation @ 13' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-Y21-1-FL	Y-21	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y21-1-SW	Y-21	Sidewall sample in south central excavation @ 13' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y22-1-FL	Y-22	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z22-1-SW	Z-22	Sidewall sample in south central excavation @ 13' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y23-1-FL	Y-23	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z23-1-SW	Z-23	Sidewall sample in south central excavation @ 13' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y24-1-FL	Y-24	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z24-1-SW	Z-24	Sidewall sample in south central excavation @ 13' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z2324-1-FL	Z-23&24	Floor sample (in partially excavated grids) in south central excavation @ 14' BG	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
DUP092210	Y-23	Field duplicate of sample CD-Y23-1-FL	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-WC-M-6-Q36	Q-36	Waste characterization sample for off-site disposal post Quick Lime treatment	9/23/2010	SO	Mitkem	9/23/2010	9/28/2010	10/26/2010	
CD-W20-2-FL	W-20	Floor re-sample due to PCB failure in south central excavation @ 16' BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-WW 15'	W-20	Sidewall sample in south central excavation @ 15' BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-EW	W-20	Sidewall sample in south central excavation @ 15' BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-NW	W-20	Sidewall sample in south central excavation @ 15' BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-SW	W-20	Sidewall sample in south central excavation @ 15' BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-2-WW 15'	W-20	Sidewall sample in south central excavation @ 15' BG. Re-sample due to PCB failure.	9/29/2010	SO	Mitkem	9/29/2010	10/4/2010	11/3/2010	
CD-W20-2-NW	W-20	Sidewall sample in south central excavation @ 15' BG. Re-sample due to PCB failure.	9/29/2010	SO	Mitkem	9/29/2010	10/4/2010	11/3/2010	
CD-BF-MX-4	Offsite	Off site backfill sample for chemical and radiological analysis	10/4/2010	SO	Mitkem	10/4/2010	10/7/2010	12/11/2010	
CD-WC-CONC-1		Waste characterization sample for off-site disposal of concrete debris pile	10/5/2010	SO	Mitkem	10/5/2010		10/18/2010	
CD-X21-1-FL	X-21	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-X22-1-FL	X-22	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-W21-1-FL	W-21	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-W22-1-FL	W-22	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-X23-1-FL	X-23	Floor sample in south central excavation @ 14' BG.	10/13/2010	SO	Mitkem	10/13/2010	10/18/2010	11/23/2010	
CD-EPA-OIL	W-20	Oil substance in north wall of grid W-20 sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-EPA-C1	V-22	Surface capacitors in area of grid V-22 sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-EPA-C2	U/V-23/24	Surface capacitors in area of grid U/V-23/24 sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-EPA-D1	V-24	Surface soil in area of grid V-24 (specifically MW-11) sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-WC-Woodchip		Waste characterization sample for off-site disposal of wood chip pile	10/25/2010	SO	Mitkem	10/25/2010		11/5/2010	
CD-WC-SCDEB-20		Waste characterization sample for off-site disposal of screened debris (pile #20)	10/25/2010	SO	Mitkem	10/25/2010		11/5/2010	
CD-P16-1-FL	P-16	Floor sample in central excavation @ 6' BG.	10/25/2010	SO	Mitkem	10/25/2010	10/28/2010	11/19/2010	
CD-ON16-1-FL	O/N-16	Floor sample in central excavation @ 6' BG. One sample taken for two partial grids	10/25/2010	SO	Mitkem	10/25/2010	10/28/2010	11/19/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-P15-1-WW	P-15	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-O16-1-WW	O-16	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-N16-1-WW	N-16	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-M16-1-WW	M-16	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
DUP102610	M-16	Field duplicate of sample CD-M16-1-WW	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-Micafilm		Sampled mica films in screened soil	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-M1617-1-FL	M-1617	Floor sample in central excavation @ 6' BG. One sample taken for two partial grids	10/27/2010	SO	Mitkem	10/27/2010	11/1/2010	11/23/2010	
CD-M18-1-FL	M-18	Floor sample in central excavation @ 6' BG.	10/27/2010	SO	Mitkem	10/27/2010	11/1/2010	11/23/2010	
CD-L1819-1-FL	L-1819	Floor sample in central excavation @ 6' BG. One sample taken for two partial grids	10/27/2010	SO	Mitkem	10/27/2010	11/1/2010	11/23/2010	
CD-L16-1-NW	L-16	Sidewall sample in central excavation @ 5' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-L17-1-NW	L-17	Sidewall sample in central excavation @ 5' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-L18-1-NW	L-18	Sidewall sample in central excavation @ 5' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-O17-1-FL	O-17	Floor sample in central excavation @ 6' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-P17-1-FL	P-17	Floor sample in central excavation @ 6' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-N17-1-FL	N-17	Floor sample in central excavation @ 6' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-P15-WP	P-15	Soil sample in central excavation of material surrounding the 36" water main	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
DUP102810	L-17	Field duplicate of sample CD-L17-1-NW	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-P16-WP	P-16	Soil sample in central excavation of material surrounding the 36" water main	10/29/2010	SO	Mitkem	10/29/2010	11/2/2010	11/24/2010	
CD-O16-2-FL	O-16	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	10/29/2010	SO	Mitkem	10/29/2010	11/2/2010	11/24/2010	
CD-N16-2-FL	N-16	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	10/29/2010	SO	Mitkem	10/29/2010	11/2/2010	11/24/2010	
CD-L20-1-FL	L-20	Floor sample in central excavation @ 6' BG.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-L19-1-NW	L-19	Sidewall sample in central excavation @ 5' BG.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-L20-1-NW	L-20	Sidewall sample in central excavation @ 5' BG.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-P15-2-WW	P-15	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-O16-2-WW	O-16	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
DUP110110	L-19	Field duplicate of sample CD-L19-1-NW	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-O16-1-SW	O-16	Sidewall sample in central excavation @ 7' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-N16-1-NW	N-16	Sidewall sample in central excavation @ 7' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-O17-2-FL	O-17	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-N17-2-FL	N-17	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-P17-WP	P-17	Soil sample in central excavation of material surrounding the 36" water main	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-M19-1-FL	M-19	Floor sample in central excavation @ 6' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-L21-1-FL	L-21	Floor sample in central excavation @ 6' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-L21-1-NW	L-21	Sidewall sample in central excavation @ 5' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
DUP110310	O-16	Field duplicate of sample CD-O16-1-SW	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-M20-1-FL	M-20	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-M21-1-FL	M-21	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-N18-1-FL	N-18	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-O18-1-FL	O-18	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-P18-1-FL	P-18	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-O16-2-SW	O-16	Sidewall sample in central excavation @ 7' BG. Add'l 2' excavated due to PCB failure	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-3-FL	O-17	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-1-NW	O-17	Sidewall sample in central excavation @ 9' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-1-WW	O-17	Sidewall sample in central excavation @ 9' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-1-SW	O-17	Sidewall sample in central excavation @ 9' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-N17-1-NW	N-17	Sidewall sample in central excavation @ 7' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
DUP110910	O-17	Field duplicate of sample CD-O17-1-SW	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-WC-SCDEB-21		Waste characterization sample for off-site disposal of screened debris (pile #21)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-WC-SCDEB-22-1		Waste characterization sample for off-site disposal of screened debris (pile #22)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-WC-SCDEB-22-2		Waste characterization sample for off-site disposal of screened debris (pile #22)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-WC-SCDEB-22-3		Waste characterization sample for off-site disposal of screened debris (pile #22)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-N19-1-FL	N-19	Floor sample in central excavation @ 6' BG.	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-O19-1-FL	O-19	Floor sample in central excavation @ 6' BG.	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-P19-1-FL	P-19	Floor sample in central excavation @ 6' BG.	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-TP-T21	T-21	Test pit in grid T-21 to determine lead and capacitor disposal area	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-TP-U25	U-25	Test pit in grid U-25 to determine lead and capacitor disposal area	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-O18-2-FL	O-18	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	11/11/2010	SO	Mitkem	11/11/2010	11/16/2010	1/24/2010	
CD-P18-2-FL	P-18	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	11/11/2010	SO	Mitkem	11/11/2010	11/16/2010	1/24/2010	
CD-O16-3-SW	O-16	Sidewall sample in central excavation @ 7' BG. Add'l 2' excavated due to PCB failure	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-O17-2-SW	O-17	Sidewall sample in central excavation @ 9' BG. Add'l 2' excavated due to PCB failure	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-N20-1-FL	N-20	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-N21-1-FL	N-21	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-O20-1-FL	O-20	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P20-1-FL	P-20	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P18-3-FL	P-18	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P19-2-FL	P-19	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P18-1-SW	P-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-P18-1-WW	P-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-O18-3-FL	O-18	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-O18-1-NW	O-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-O18-1-EW	O-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-Q20-1-FL	Q-20	Floor sample in central excavation @ 6' BG.	11/17/2010	SO	Mitkem	11/17/2010	11/23/2010	12/30/2010	
CD-R20-1-FL	R-20	Floor sample in central excavation @ 6' BG.	11/17/2010	SO	Mitkem	11/17/2010	11/23/2010	12/30/2010	
CD-N17-1-EW	N-17	Sidewall sample in central excavation @ 7' BG.	11/17/2010	SO	Mitkem	11/17/2010	11/23/2010	12/30/2010	
CD-P21-1-FL	P-21	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-Q21-1-FL	Q-21	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-R21-1-FL	R-21	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-S19-1-FL	S-19	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-T19-1-FL	T-19	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-OVER-111810	P-26	Possible overburden material	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
DUP111810	R-21	Field duplicate of sample CD-R21-1-FL	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-P18-4-FL	P-18	Floor sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	11/19/2010	SO	Mitkem	11/19/2010	11/29/2010	12/30/2010	
CD-P19-3-FL	P-19	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure	11/19/2010	SO	Mitkem	11/19/2010	11/29/2010	12/30/2010	
CD-P20-2-FL	P-20	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure	11/19/2010	SO	Mitkem	11/19/2010	11/29/2010	12/30/2010	
CD-O21-1-FL	O-21	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-O22-1-FL	O-22	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-N22-1-FL	N-22	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-S20-1-FL	S-20	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-P22-1-FL	P-22	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-P18-WP7' A	P-18	Sample taken under direction of USEPA/ACE directly under 36" water pipe	11/30/2010	SO	Mitkem	11/30/2010	12/6/2010	2/5/2011	
CD-P18-WP7' B	P-18	Sample taken under direction of USEPA/ACE directly under 36" water pipe	11/30/2010	SO	Mitkem	11/30/2010	12/6/2010	2/5/2011	
CD-N17-2-EW	N-17	Sidewall sample in central excavation @ 7' BG. Add'l 2' excavated due to PCB failure	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-2-SW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-2-WW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-1-EW	P-18	Sidewall sample in central excavation @ 12' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-1-NW	P-18	Sidewall sample in central excavation @ 12' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P19-1-NW	P-19	Sidewall sample in central excavation @ 9' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P19-1-SW	P-19	Sidewall sample in central excavation @ 9' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P20-3-FL	P-20	Floor sample in central excavation @ 9' BG. Add'l 1' excavated due to PCB failure	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-CLAYE-120210		Possible overburden clay material	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-CLAYW-120210		Possible overburden clay material	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-OVER-120210		Possible overburden material	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-O22-FL3.5'	O-22	USEPA sample FIO in gird O-22 @3.5'. PCB	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-1202PILEPM		USEPA sample FIO. PCB Only.	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-WC-T21TP	T-21	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-U20TP	U-20	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-V22TP	V-22	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-U23TP	U-23	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-U24TP	U-24	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-M22-1-FL	M-22	Floor sample in central excavation @ 6' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-M22-1-NW	M-22	Sidewall sample in central excavation @ 5' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-M23-1-FL	M-23	Floor sample in central excavation @ 6' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-M23-1-NW	M-23	Sidewall sample in central excavation @ 5' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-O23-1-FL	O-23	Floor sample in central excavation @ 6' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-MAXY-BAG		Section of filter from baghouse with hardened soil clogging filters	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-MAXY-CALCINER		Soil (black crust) that built up along calciner walls.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
DUP120610	O-23	Field duplicate of sample CD-O23-1-FL	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-O21-WP7'	O-21	Sample taken under direction of USEPA/ACE directly under 36" water pipe	12/7/2010	SO	Mitkem	12/7/2010	12/13/2010	2/12/2011	
CD-1210PILEPM		USEPA sample FIO. Normal analysis minus PCB.	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P18-3-WW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P18-3-SW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P20-4-FL11'	P-20	Sample in central excavation @ 11' BG. Sample obtained by USEPA FIO. PCB only	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P20-1-SW	P-20	Sidewall sample in central excavation @ 12' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-P20-1-EW	P-20	Sidewall sample in central excavation @ 12' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-P20-1-NW	P-20	Sidewall sample in central excavation @ 12' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-U19-1-FL	U-19	Floor sample in central excavation @ 6' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
DUP121310	U-19	Field duplicate of sample CD-U19-1-FL	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-WC-SCDEB-23-1		Waste characterization sample for off-site disposal of screened debris (pile #23)	12/13/2010	SO	Mitkem	12/13/2010		12/28/2010	
CD-WC-SCDEB-23-2		Waste characterization sample for off-site disposal of screened debris (pile #23)	12/13/2010	SO	Mitkem	12/13/2010		12/28/2010	
CD-P18-4-WW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	12/16/2010	SO	Mitkem	12/16/2010	12/21/2010	2/12/2011	
CD-P20-2-NW	P-20	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y26-6'	Y-26	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y26-10'	Y-26	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y26-14'	Y-26	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y27-6'	Y-27	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y27-10'	Y-27	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y27-14'	Y-27	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z26-6'	Z-26	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z26-10'	Z-26	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z26-13'	Z-26	Test pit sampled to see if excavation is necessary, bedrock @ 13'	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z27-6'	Z-27	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z27-10'	Z-27	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z27-12'	Z-27	Test pit sampled to see if excavation is necessary, bedrock @ 12'	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
DUP121710	Z-26	Field duplicate of sample CD-Z26-6'	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-WC-U21TP	U-21	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-U22TP	U-22	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-T22TP	T-22	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-T23TP	T-23	Test pits in capacitor disposal and high lead area, sample prior to offsite disposa	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-SCDEB-24-1		Waste characterization sample for off-site disposal of screened debris (pile #24)	12/29/2010	SO	Mitkem	12/29/2010		1/11/2011	
CD-WC-SCDEB-24-2		Waste characterization sample for off-site disposal of screened debris (pile #24)	12/29/2010	SO	Mitkem	12/29/2010		1/11/2011	
CD-WC-CLAYW		Waste characterization sample for off-site disposal of clay pile (west side)	12/29/2010	SO	Mitkem	12/29/2010		1/11/2011	
CD-W31-1-FL	W-31	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-W32-1-FL	W-32	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-X31-1-FL	X-31	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-X32-1-FL	X-32	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
DUP010311	W-31	Field duplicate of sample CD-W31-1-FL	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-WC-SCDEB-25-1		Waste characterization sample for off-site disposal of screened debris (pile #25)	1/18/2011	SO	Mitkem	1/18/2011		2/1/2011	
CD-WC-SCDEB-25-2		Waste characterization sample for off-site disposal of screened debris (pile #25)	1/18/2011	SO	Mitkem	1/18/2011		2/1/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-X24-8'	X-24	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X24-10'	X-24	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X24-13'	X-24	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X25-8'	X-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X25-10'	X-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X25-13'	X-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X26-8'	X-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X26-11'	X-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X26-13'	X-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X27-9'	X-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X27-11'	X-27	Test pit sampled to see if excavation is necessary. Bedrock @ 12' BG	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W26-8'	W-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W26-11'	W-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W26-13'	W-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W27-8'	W-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W27-11'	W-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W27-13'	W-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-ZY25-7'	Z&Y-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-ZY25-10'	Z&Y-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-ZY25-13'	Z&Y-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-AA25-7'	AA-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-AA25-10'	AA-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-AA25-13'	AA-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
DUP012011	W-27	Field duplicate of sample CD-W27-8'	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
MXY-GRH-DIRT		Sample of feed soil, analyzed for TOC and BTU.	2/1/2011	SO	Mitkem	2/1/2011	2/8/2011	3/10/2011	
MXY-GRH-COAL		Sample of possible coal material, analyzed for TOC and BTU.	2/1/2011	ROCK	Mitkem	2/1/2011	2/8/2011	3/10/2011	
CD-WC-SCDEB-26-1		Waste characterization sample for off-site disposal of screened debris (pile #26)	2/3/2011	SO	Mitkem	2/3/2011		3/10/2011	
CD-WC-SCDEB-26-2		Waste characterization sample for off-site disposal of screened debris (pile #26)	2/3/2011	SO	Mitkem	2/3/2011		3/10/2011	
CD-WC-SCDEB-26-3		Waste characterization sample for off-site disposal of screened debris (pile #26)	2/3/2011	SO	Mitkem	2/3/2011		3/10/2011	
MXY-GRH-DIRT0204		Sample of feed soil, analyzed for TOC and BTU.	2/4/2011	SO	Mitkem	2/4/2011	2/8/2011	3/10/2011	
MXY-GRH-SLAG		Sample of slag material, analyzed for TOC and BTU.	2/4/2011	SLAG	Mitkem	2/4/2011	2/8/2011	3/10/2011	
CD-P27-1-FL	P-27	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-P28-1-FL	P-28	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-P29-1-FL	P-29	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-O28-1-FL	O-28	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-O29-1-FL	O-29	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-O30-1-FL	O-30	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
DUP021011	P-27	Field duplicate of sample CD-P27-1-FL	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
DUP2021011	O-30	Field duplicate of sample CD-O30-1-FL	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-P30-1-FL	P-30	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-O31-1-FL	O-31	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N28-1-FL	N-28	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N29-1-FL	N-29	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N30-1-FL	N-30	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N31-1-FL	N-31	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-M29-1-FL	M-29	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-M30-1-FL	M-30	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
DUP021411	P-30	Field duplicate of sample CD-P30-1-FL	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-Z27-1-NW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-Z27-1-EW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-Z27-1-WW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-Z27-1-SW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-26-1		Post Excavation sample of debris pile #26 (shale pile), possible on-site backfil	2/17/2011	SO	Mitkem	2/17/2011	2/23/2011	3/30/2011	
CD-26-2		Post Excavation sample of debris pile #26 (shale pile), possible on-site backfil	2/17/2011	SO	Mitkem	2/17/2011	2/23/2011	3/30/2011	
CD-26-3		Post Excavation sample of debris pile #26 (shale pile), possible on-site backfil	2/17/2011	SO	Mitkem	2/17/2011	2/23/2011	3/30/2011	
CD-WC-SCDEB-27-1		Waste characterization sample for off-site disposal of screened debris (pile #27)	2/17/2011	SO	Mitkem	2/17/2011		3/2/2011	
CD-WC-SCDEB-27-2		Waste characterization sample for off-site disposal of screened debris (pile #27)	2/17/2011	SO	Mitkem	2/17/2011		3/2/2011	
CD-WC-SCDEB-28		Waste characterization sample for off-site disposal of screened debris (pile #28)	2/17/2011	SO	Mitkem	2/17/2011		3/2/2011	
Samples taken after 36" water main break caused site-wide flood									
CD-AA25-1-SW	AA-25	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-AA26-1-SW	AA-26	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-AA27-1-SW	AA-27	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-AA252627-1FV-FL	AA-25, 26, 27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flooc	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z26-1FV-FL	Z-26	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flooc	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-NW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-EW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-WW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-SW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z28-1-SW	Z-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z28-1-EW	Z-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z28-1-FL	Z-28	Floor sample in central excavation @ 7' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Y27-1FV-FL	Y-27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flooc	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Y28-1-FL	Y-28	Floor sample in central excavation @ 7' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Y28-1-EW	Y-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-X28-1-EW	X-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-W28-1-EW	W-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
DUP030411	X-28	Field duplicate of sample CD-X28-1-EW	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
DUP2030411	AA-27	Field duplicate of sample CD-AA27-1-SW	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-M29-2-FL	M-29	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to VOC failure	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-M30-2-FL	M-30	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to VOC failure	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-N28-2-FL	N-28	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to VOC failure	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-N29-1FV-FL	N-29	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-N30-1FV-FL	N-30	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-P27-1FV-FL	P-27	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-P28-1FV-FL	P-28	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-P29-1FV-FL	P-29	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-O28-1FV-FL	O-28	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-O29-1FV-FL	O-29	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-O30-1FV-FL	O-30	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flooc	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
DUP030811	N-30	Field duplicate of sample CD-N30-1FV-FL	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
DUP2030811	O-28	Field duplicate of sample CD-O28-1FV-FL	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-W26-1-EW	W-26	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-W27-1FV-FL	W-27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flooc	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-W28-1-FL	W-28	Floor sample in central excavation @ 7' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X26-1-EW	X-26	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X26-1-SW	X-26	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X27-1FV-FL	X-27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flooc	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X28-1-FL	X-28	Floor sample in central excavation @ 7' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Y26-1FV-FL	Y-26	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flooc	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Y25-1-EW	Y-25	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Z25-1-EW	Z-25	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Z25-1-SW	Z-25	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-AA24-1-EW	AA-24	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-AA24-1-SW	AA-24	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
DUP030911	X-28	Field duplicate of sample CD-X28-1-FL	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Q27-1-FL	Q-27	Floor sample in central excavation @ 6' BG.	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
CD-Q28-1-FL	Q-28	Floor sample in central excavation @ 6' BG.	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
CD-Q29-1-FL	Q-29	Floor sample in central excavation @ 6' BG.	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
DUP031111	Q-27	Field duplicate of sample CD-Q27-1-FL	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
CD-M29-3-FL	M-29	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to VOC failure	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-NW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-WW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-EW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-SW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-V24-1-FL	V-24	Floor sample in central excavation @ 8' BG.	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
CD-V25-1-FL	V-25	Floor sample in central excavation @ 8' BG.	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
CD-V26-1-FL	V-26	Floor sample in central excavation @ 8' BG.	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
DUP031511	V-25	Field duplicate of sample CD-V25-1-FL	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
CD-L26-1-NW	L-26	Sidewall sample in central excavation @ 5' BG.	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M26-0-3'	M-26	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M26-6'	M-26	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M27-0-3'	M-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M27-6'	M-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-L27-0-3'	L-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-L27-6'	L-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-LK28-0-3.5'	LK-28	Test pit sampled to see if excavation is necessary	3/18/2011	SO	Mitkem	3/18/2011	3/22/2011	4/14/2011	
CD-LK28-3.5'-8'	LK-28	Test pit sampled to see if excavation is necessary	3/18/2011	SO	Mitkem	3/18/2011	3/22/2011	4/14/2011	
CD-WC-M-V22	V-22	Waste characterization sample for off-site disposal post Maectite treatment	3/21/2011	SO	Mitkem	3/21/2011	3/25/2011	4/14/2011	
CD-WC-M-T21	T-21	Waste characterization sample for off-site disposal post Maectite treatment	3/21/2011	SO	Mitkem	3/21/2011	3/25/2011	4/14/2011	
CD-P24-0-3'	P-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P24-3'-8'	P-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P24-8'-14'	P-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-0-2'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-2'-5'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-5'-11'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-11'-14'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-R24-0-3'	R-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-R24-3'-9'	R-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-R24-9'-14'	R-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
DUP032211	R-24	Field duplicate of sample CD-R24-0-3'	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-WC-P24TP	P-24	Waste characterization sample for off-site disposal of grid	3/22/2011	SO	Mitkem	3/22/2011		4/5/2011	
CD-WC-P26TP	P-26	Waste characterization sample for off-site disposal of grid	3/22/2011	SO	Mitkem	3/22/2011		4/5/2011	
CD-WC-R24TP	R-24	Waste characterization sample for off-site disposal of grid	3/22/2011	SO	Mitkem	3/22/2011		4/5/2011	
CD-WC-M-U23	U-23	Waste characterization sample for off-site disposal post Maectite treatment	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-WC-M-T23	T-23	Waste characterization sample for off-site disposal post Maectite treatment	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N24-2'-4'	N-24	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N24-4'-6'	N-24	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N26-3'-4'	N-26	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N26-4'-6'	N-26	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-K29-0.5'-6'	K-29	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-K31-2'-6'	K-31	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-L34-3'-6'	L-34	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-M32-0.5'-6'	M-32	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-WC-U27	U-27	Waste characterization sample for off-site disposal of CDA grid	3/28/2011	SO	Mitkem	3/28/2011		4/6/2011	
CD-WC-U28	U-28	Waste characterization sample for off-site disposal of CDA grid	3/28/2011	SO	Mitkem	3/28/2011		4/6/2011	
CD-WC-U29	U-29	Waste characterization sample for off-site disposal of CDA grid	3/28/2011	SO	Mitkem	3/28/2011		4/6/2011	
CD-WC-BlkScr-1		Waste characterization sample for off-site disposal of screened black soi	3/28/2011	SO	Mitkem	3/28/2011		4/5/2011	
CD-WC-BlkScr-2		Waste characterization sample for off-site disposal of screened black soi	3/28/2011	SO	Mitkem	3/28/2011		4/5/2011	
CD-WC-BlkDeb		Waste characterization sample for off-site disposal of screened black debris	3/28/2011	SO	Mitkem	3/28/2011		4/5/2011	
CD-SHALENORTH-0331		Sample of crushed shale prior to use as on-site backfill, shale from water main washou	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-SHALESOUTH-0331		Sample of crushed shale prior to use as on-site backfill, shale from water main washou	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q36-1-FL	Q-36	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q37-1-FL	Q-37	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q38-1-FL	Q-38	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q39-1-FL	Q-39	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-R39-1-FL	R-39	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-R40-1-FL	R-40	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-S39-1-FL	S-39	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-S40-1-FL	S-40	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q40-1-FL	Q-40	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-Q41-1-FL	Q-41	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-R41-1-FL	R-41	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-S41-1-FL	S-41	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
DUP040411	Q-40	Field duplicate of sample CD-Q40-1-FL	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-S39-2-FL	S-39	Floor sample in northeast excavation @ 8' BG. Add'l 2' excavated due to PCB failure	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S39-1-EW	S-39	Sidewall sample in northeastern excavation @ 7' BG.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S39-1-NW	S-39	Sidewall sample in northeastern excavation @ 7' BG.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S39-1-SW	S-39	Sidewall sample in northeastern excavation @ 7' BG.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S24-5'-10'	S-24	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S24-10'-14'	S-24	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S26-5'-12'	S-26	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S26-12'-14'	S-26	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-T25-5'-11'	T-25	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-T25-11'-14'	T-25	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-XYZ-SHALE		Shale pile from X, Y, & Z grids, scraped after flood. Sampled prior to backfil	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-N25-1-FL	N-25	Floor sample in central excavation @ ~4' BG. QA sample CD-N25-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-O24-1-FL	O-24	Floor sample in central excavation @ ~4' BG. QA sample CD-O24-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-O25-1-FL	O-25	Floor sample in central excavation @ ~4' BG. QA sample CD-O25-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-P25-1-FL	P-25	Floor sample in central excavation @ ~4' BG. QA sample CD-P25-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-Q23-5'-10'	Q-23	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-Q23-10'-14'	Q-23	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-Q25-5'-10'	Q-25	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-Q25-10'-14'	Q-25	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-M38-9'-14'	M-38	Test pit sampled to see if excavation is necessary	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-S41-1-EW	S-41	Sidewall sample along eastern perimeter @ 7' BG. QA sample CD-S41-1-EWMP here	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-R41-1-EW	R-41	Sidewall sample along eastern perimeter @ 7' BG. QA sample CD-R41-1-EWMP here	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-O39-1-FL	O-39	Floor sample in northeastern excavation @ 13' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-O40-1-FL	O-40	Floor sample in northeastern excavation @ 10' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-P39-1-FL	P-39	Floor sample in northeastern excavation @ 12' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-P40-1-FL	P-40	Floor sample in northeastern excavation @ 10' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-P41-1-FL	P-41	Floor sample in northeastern excavation @ 10' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-Q41-1-EW	Q-41	Sidewall sample along eastern perimeter @ 7' BG. QA sample CD-Q41-1-EWMP here	4/12/2011	SO	Mitkem	4/12/2011	4/15/2011	5/23/2011	
CD-P41-1-NW	P-41	Sidewall sample along eastern perimeter @ 9' BG. QA sample CD-P41-1-NWMP here	4/12/2011	SO	Mitkem	4/12/2011	4/15/2011	5/23/2011	
CD-O40-1-NW	O-40	Sidewall sample along eastern perimeter @ 9' BG. QA sample CD-O40-1-NWMP here	4/12/2011	SO	Mitkem	4/12/2011	4/15/2011	5/23/2011	
CD-Q24-1-FL	Q-24	Floor sample in central excavation @ ~4' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N39-1-NW	N-39	Sidewall sample along northern perimeter @ 10' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N39-1-FL	N-39	Floor sample in northeastern excavation @ 11' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N40-1-NW	N-40	Sidewall sample along northern perimeter @ 10' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N40-1-FL	N-40	Floor sample in northeastern excavation @ 11' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
DUP1041411	N-40	Field duplicate of sample CD-N40-1-FL	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
DUP2041411	N-39	Field duplicate of sample CD-N39-1-NW	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-O37-10'-12'	O-37	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-O37-12'-14'	O-37	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-O38-10'-12'	O-38	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-O38-12'-14'	O-38	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-P37-SL	P-37	Sampled soil and stone directly under sanitary line	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-P37-9'-14'	P-37	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-P38-9'-14'	P-38	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-N37-10'-14'	N-37	Test pit sampled to see if excavation is necessary	4/26/2011	SO	Mitkem	4/26/2011	4/29/2011	5/23/2011	
CD-N38-10'-14'	N-38	Test pit sampled to see if excavation is necessary	4/26/2011	SO	Mitkem	4/26/2011	4/29/2011	5/23/2011	
CD-P31-6'	P-31	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-P32-8'	P-32	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-Q30-7'	Q-30	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-Q31-7'	Q-31	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-WC-Q32-0'-4'	Q-32	Waste characterization sample for off-site disposal of gray ash filled with capacitor	4/29/2011	SO	Mitkem	4/29/2011		5/12/2011	
CD-Q32-4'-6'	Q-32	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R27-6'-13'	R-27	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R27-13'-14'	R-27	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R29-7'	R-29	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-WC-R3132-0'-4'	R-31 32	Waste characterization sample for off-site disposal of gray ash filled with capacitor	4/29/2011	SO	Mitkem	4/29/2011		6/6/2011	
CD-R3132-4'-6'	R-31 32	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R25-3'-12'	R-25	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-R25-12'-14'	R-25	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-N27-3'-6'	N-27	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-O26-3'-6'	O-26	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-O27-3'-6'	O-27	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-WC-BlkScr-3		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-WC-BlkScr-4		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-WC-BlkScr-5		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-WC-BlkScr-6		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-R23-5'-11'	R-23	Test pit sampled to see if excavation is necessary	5/5/2011	SO	Mitkem	5/5/2011	5/10/2011	6/6/2011	
CD-R23-11'-14'	R-23	Test pit sampled to see if excavation is necessary	5/5/2011	SO	Mitkem	5/5/2011	5/10/2011	6/6/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-SCDEB-29		Waste characterization sample for off-site disposal of screened debris (pile #29)	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S22-7'-14'	S-22	In-situ waste characterization sample for off-site disposal of grid S-22	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S23-7'-14'	S-23	In-situ waste characterization sample for off-site disposal of grid S-23	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S27-7'-14'	S-27	In-situ waste characterization sample for off-site disposal of grid S-27	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S28-7'-14'	S-28	In-situ waste characterization sample for off-site disposal of grid S-28	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-T27-7'-14'	T-27	In-situ waste characterization sample for off-site disposal of grid T-27	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-T28-0'-7'	T-28	In-situ waste characterization sample for off-site disposal of grid T-28	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-T28-7'-14'	T-28	In-situ waste characterization sample for off-site disposal of grid T-28	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-BF-MX-5	Off-site	Sample taken off-site (@ Weldon Quarry) of DGA backfill materia	5/9/2011	SO	Mitkem	5/9/2011		6/29/2011	
CD-P15-3-WW	P-15	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure	5/9/2011	SO	Mitkem	5/9/2011	5/12/2011	6/10/2011	
CD-P37-1-FL	P-37	Floor sample in northeastern excavation @ 14' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P37-1-NW	P-37	Sidewall sample in northeastern excavation @ 13' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P37-1-WW	P-37	Sidewall sample in northeastern excavation @ 13' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P37-1-SW	P-37	Sidewall sample in northeastern excavation @ 13' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P33-1-FL	P-33	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P34-1-FL	P-34	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P35-1-FL	P-35	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-O34-1-FL	O-34	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-N23-1-FL	N-23	Floor sample in central excavation @ 3' BG.	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-N34-12'-14'	N-34	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-N35-12'-14'	N-35	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-N36-12'-14'	N-36	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-O35-11'-14'	O-35	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-O36-11'-14'	O-36	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-P36-10'-14'	P-36	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-P20-3-NW	P-20	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated due to PCB failure	5/12/2011	SO	Mitkem	5/12/2011	5/17/2011	6/17/2011	
CD-P15-4-WW	P-15	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-H2829-0-6'	H-2829	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-I28-0-6'	I-28	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-I29-0-6'	I-29	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-J28-0-5'	J-28	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-J28-5-6'	J-28	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-J29-0-6'	J-29	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
DUP051911	P-15	Field duplicate of sample CD-P15-4-WW	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-K30-2-6'	K-30	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-L29-4-6'	L-29	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-L30-10'	L-30	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-L32-9'	L-32	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-LM33-3-6'	L/M-33	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-N32-4'-6'	N-32	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-N33-3'-6'	N-33	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-P20-4-NW	P-20	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated due to PCB failure	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-P23-1-FL	P-23	Floor sample in central excavation @ 4' BG.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-Q22-1-FL	Q-22	Floor sample in central excavation @ 4' BG.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-R22-1-FL	R-22	Floor sample in central excavation @ 4' BG.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-N34-1-NW	N-34	Sidewall sample in northeastern excavation @ 13' BG. QA sample CD-N34-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N35-1-NW	N-35	Sidewall sample in northeastern excavation @ 13' BG. QA sample CD-N35-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N36-1-NW	N-36	Sidewall sample in northeastern excavation @ 13' BG. QA sample CD-N36-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-NW	N-37	Sidewall sample in northeastern excavation @ 13' BG. QA sample CD-N37-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-NW	M-38	Sidewall sample in northeastern excavation @ 13' BG. QA sample CD-M38-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-WW	N-37	Sidewall sample in northeastern excavation @ 13' BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-EW	N-37	Sidewall sample in northeastern excavation @ 13' BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-SW	N-37	Sidewall sample in northeastern excavation @ 13' BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-WW	M-38	Sidewall sample in northeastern excavation @ 13' BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-EW	M-38	Sidewall sample in northeastern excavation @ 13' BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-SW	M-38	Sidewall sample in northeastern excavation @ 13' BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M24-1-FL	M-24	Floor sample in central excavation @ 3' BG. QA sample CD-M24-1-FLMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M24-1-NW	M-24	Sidewall sample in central excavation @ 2' BG. QA sample CD-M24-1-NWMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M25-1-FL	M-25	Floor sample in central excavation @ 3' BG. QA sample CD-M25-1-FLMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M25-1-NW	M-25	Sidewall sample in central excavation @ 2' BG. QA sample CD-M25-1-NWMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M25-WP	M-25	USEPA directed FIO sample directly under 36" water main	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-WC-M-2-V22	V-22	Waste characterization sample for off-site disposal post Quick Lime treatment	5/26/2011	SO	Mitkem	5/26/2011		7/7/2011	
CD-WC-M-2-U23	U-23	Waste characterization sample for off-site disposal post Quick Lime treatment	5/26/2011	SO	Mitkem	5/26/2011		7/7/2011	
CD-M38-2-WW	M-38	Sidewall sample in east excavation @ 13' BG. Add'l 2' excavated due to PCB failure	5/31/2011	SO	Mitkem	5/31/2011	6/3/2011	7/7/2011	
CD-L31-8'	L-31	Test pit sampled to see if excavation is necessary	5/31/2011	SO	Mitkem	5/31/2011	6/3/2011	7/7/2011	
CD-WC-L30	L-30	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-WC-L31	L-31	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-WC-L32	L-32	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-WC-M34	M-34	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-Q3334-1-FL	Q-33 &34	Floor sample in central excavation @ 10' BG. QA sample CD-Q3334-1-FLMP	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-Q35-1-FL	Q-35	Floor sample in central excavation @ 10' BG. QA sample CD-Q35-1-FLMP	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-BinBlock-1		Sampled on-site bin blocks to determine level of contaminatior	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-BinBlock-2		Sampled on-site bin blocks to determine level of contaminatior	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-BinBlock-3		Sampled on-site bin blocks to determine level of contaminatior	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-I17-0'-1'	I-17	Sampled DGA material in LTTD Greenhouse footprint (NW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-I20-0'-1'	I-20	Sampled DGA material in LTTD Greenhouse footprint (NE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J17-0'-1'	J-17	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J20-0'-1'	J-20	Sampled DGA material in LTTD Greenhouse footprint (SE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J12-0'-1'	J-12	Sampled DGA material in LTTD WWTP footprint (NW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J13-0'-1'	J-13	Sampled DGA material in LTTD WWTP footprint (NE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-K12-0'-1'	K-12	Sampled DGA material in LTTD WWTP footprint (SW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-K13-0'-1'	K-13	Sampled DGA material in LTTD WWTP footprint (SE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
DUP060211	I-20	Field duplicate of sample CD-I20-0'-1'	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-WC-S22-0'-7'	S-22	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7' BG	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-S23-0'-7'	S-23	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7' BG	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SOIL-1		Waste characterization sample for off-site disposal of soil (pile #1)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-30		Waste characterization sample for off-site disposal of screened debris (pile #30)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-31		Waste characterization sample for off-site disposal of screened debris (pile #31)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-32		Waste characterization sample for off-site disposal of screened debris (pile #32)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-33		Waste characterization sample for off-site disposal of screened debris (pile #33)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-34		Waste characterization sample for off-site disposal of screened debris (pile #34)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-U21-PCB	U-21	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-U22-PCB	U-22	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-T22-PCB	T-22	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-T23-PCB	T-23	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-WC-Blk-7		Waste characterization sample for off-site disposal of black material (pile #7	6/13/2011	SO	Mitkem	6/13/2011		7/8/2011	
CD-WC-Blk-8		Waste characterization sample for off-site disposal of black material (pile #8	6/13/2011	SO	Mitkem	6/13/2011		7/9/2011	
CD-WC-Blk-9		Waste characterization sample for off-site disposal of black material (pile #9	6/13/2011	SO	Mitkem	6/13/2011		7/10/2011	
CD-J13-1-EW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-J13-1-NW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-J13-1-SW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-J13-1-WW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-Q26-4'	Q-26	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R26-5'-10'	R-26	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R26-10'-14'	R-26	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R28-8'-12'	R-28	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R28-12'-14'	R-28	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
DUP061511	Q-26	Field duplicate of sample CD-Q26-4'	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-WC-SCDEB-35		Waste characterization sample for off-site disposal of screened debris (pile #35)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-10		Waste characterization sample for off-site disposal of black material (pile #10	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-11		Waste characterization sample for off-site disposal of black material (pile #11	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-12		Waste characterization sample for off-site disposal of black material (pile #12	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-13		Waste characterization sample for off-site disposal of black material (pile #13	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-14		Waste characterization sample for off-site disposal of black material (pile #14	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-R28-0'-8'	R-28	In-situ sample of black ash material prior to off-site disposal, depth range 0'-8' BG	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-T23-8'-14'	T-23	Test pit sampled to see if excavation is necessary	6/22/2011	SO	Mitkem	6/22/2011	6/27/2011	7/21/2011	
CD-U24-7'-14'	U-24	Test pit sampled to see if excavation is necessary	6/22/2011	SO	Mitkem	6/22/2011	6/27/2011	7/21/2011	
CD-V22-8'-14'	V-22	Test pit sampled to see if excavation is necessary	6/22/2011	SO	Mitkem	6/22/2011	6/27/2011	7/21/2011	
CD-U21-7'-14'	U-21	Test pit sampled to see if excavation is necessary	6/27/2011	SO	Mitkem	6/27/2011	7/1/2011	7/21/2011	
CD-T21-7'-14'	T-21	Test pit sampled to see if excavation is necessary	6/27/2011	SO	Mitkem	6/27/2011	7/1/2011	7/21/2011	
CD-WC-SCSOIL-36		Waste characterization sample for off-site disposal of screened soil (pile #36)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-37		Waste characterization sample for off-site disposal of screened soil (pile #37)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-38		Waste characterization sample for off-site disposal of screened soil (pile #38)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-39		Waste characterization sample for off-site disposal of screened soil (pile #39)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-40		Waste characterization sample for off-site disposal of screened soil (pile #40)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-41		Waste characterization sample for off-site disposal of screened soil (pile #41)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-42		Waste characterization sample for off-site disposal of screened soil (pile #42)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-43		Waste characterization sample for off-site disposal of screened soil (pile #43)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-44		Waste characterization sample for off-site disposal of screened soil (pile #44)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-45		Waste characterization sample for off-site disposal of screened soil (pile #45)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-S24-6'-14'	S-24	In-situ sample of soils prior to off-site disposal, depth range 6'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-S25-6'-14'	S-25	In-situ sample of soils prior to off-site disposal, depth range 6'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-S26-6'-14'	S-26	In-situ sample of soils prior to off-site disposal, depth range 6'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T23-8'-14'	T-23	In-situ sample of soils prior to off-site disposal, depth range 8'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T24-7'-14'	T-24	In-situ sample of soils prior to off-site disposal, depth range 7'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T25-7'-14'	T-25	In-situ sample of soils prior to off-site disposal, depth range 7'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T26-7'-14'	T-26	In-situ sample of soils prior to off-site disposal, depth range 7'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-ASPH-11		Waste characterization sample for off-site disposal of asphalt (pile #11)	6/30/2011	SO	Mitkem	6/30/2011		7/13/2011	
CD-WC-ASPH-12		Waste characterization sample for off-site disposal of asphalt (pile #12)	6/30/2011	SO	Mitkem	6/30/2011		7/13/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-T21-9'-14'	T-21	In-situ sample of soils prior to off-site disposal, depth range 9'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-T22-8'-14'	T-22	In-situ sample of soils prior to off-site disposal, depth range 8'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U21-9'-14'	U-21	In-situ sample of soils prior to off-site disposal, depth range 9'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U22-8'-14'	U-22	In-situ sample of soils prior to off-site disposal, depth range 8'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U23-8'-14'	U-23	In-situ sample of soils prior to off-site disposal, depth range 8'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U24-6'-14'	U-24	In-situ sample of soils prior to off-site disposal, depth range 6'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U25-6'-14'	U-25	In-situ sample of soils prior to off-site disposal, depth range 6'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U26-10'-14'	U-26	In-situ sample of soils prior to off-site disposal, depth range 10'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-V20-8'-14'	V-20	In-situ sample of soils prior to off-site disposal, depth range 8'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V21-8'-14'	V-21	In-situ sample of soils prior to off-site disposal, depth range 8'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V23-9'-14'	V-23	In-situ sample of soils prior to off-site disposal, depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V27-9'-14'	V-27	In-situ sample of soils prior to off-site disposal, depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V28-9'-14'	V-28	In-situ sample of soils prior to off-site disposal, depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V29-9'-14'	V-29	In-situ sample of soils prior to off-site disposal, depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-T20-1-FL	T-20	Floor sample in central excavation @ 6' BG.	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
CD-U20-1-FL	U-20	Floor sample in central excavation @ 6' BG.	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
CD-S21-1-FL	S-21	Floor sample in central excavation @ 6' BG.	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
DUP071111	U-20	Field duplicate of sample CD-U20-1-FL	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
CD-H2829-1-FL	H-2829	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-J29-1-FL	J-29	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-K29-1-FL	K-29	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-K3031-1-FL	K-3031	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
DUP071211	K-29	Field duplicate of sample CD-K29-1-FL	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-WC-H2829-0'-6'	H-2829	In-situ sample of soils prior to off-site disposal, depth range 0'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-J28-0'-5'	J-28	In-situ sample of soils prior to off-site disposal, depth range 0'-5' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-J29-0'-6'	J-29	In-situ sample of soils prior to off-site disposal, depth range 0'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-K29-0.5'-6'	K-29	In-situ sample of soils prior to off-site disposal, depth range 0.5'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-K3031-2'-6'	K-3031	In-situ sample of soils prior to off-site disposal, depth range 2'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-SCSOIL-46		Waste characterization sample for off-site disposal of screened soil (pile #46`	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-WC-SCSOIL-47		Waste characterization sample for off-site disposal of screened soil (pile #47`	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-WC-SCSOIL-48		Waste characterization sample for off-site disposal of screened soil (pile #48`	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-WC-SCSOIL-49		Waste characterization sample for off-site disposal of screened soil (pile #49`	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-BF-MX-6		Sample taken off-site (@ Weldon Quarry) of on-site DGA backfill materia	7/19/2011	SO	Mitkem	7/19/2011		8/18/2011	
CD-P14-1-FL	P-14	Floor sample in central excavation @ 4' BG. Taken after P-15 WW sample failures	7/27/2011	SO	Mitkem	7/27/2011	8/1/2011	8/25/2011	
CD-WC-ASPH-13		Waste characterization sample for off-site disposal of asphalt (pile #13`	7/27/2011	SO	Mitkem	7/27/2011		8/10/2011	
CD-B5-1-FL	B-5	Floor sample in northwest excavation @ 2' BG. QA Sample CD-B5-1-FLMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-NW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-NWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-EW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-EWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-SW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-SWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-WW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-WWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B9-1-FL	B-9	Floor sample in northwest excavation @ 2' BG. QA Sample CD-B9-1-FLMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-NW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-NWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-EW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-EWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-SW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-SWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-WW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-WWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-WC-SCSOIL-50		Waste characterization sample for off-site disposal of screened soil (pile #50`	8/10/2011	SO	Mitkem	8/10/2011		8/24/2011	
CD-A4-1-FL	A-4	Floor sample in northwest excavation @ 0' BG.	8/11/2011	SO	Mitkem	8/11/2011	8/16/2011	9/16/2011	
CD-A5-ASPH	A-5	Asphalt sample taken from A-5 grid, analyzed for PCB only	8/16/2011	SO	Mitkem	8/16/2011	8/19/2011	9/12/2011	
CD-A5-1-FL	A-5	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A6-1-FL	A-6	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A7-1-FL	A-7	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A8-1-FL	A-8	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A9-1-FL	A-9	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-B6-1-FL	B-6	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-B7-1-FL	B-7	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-B8-1-FL	B-8	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
DUP081711	A-6	Field duplicate of sample CD-A6-1-FL	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-WC-SCSOIL-51		Waste characterization sample for off-site disposal of screened soil (pile #51`	8/18/2011	SO	Mitkem	8/18/2011		8/31/2011	
CD-WC-SCSOIL-52		Waste characterization sample for off-site disposal of screened soil (pile #52`	8/18/2011	SO	Mitkem	8/18/2011		8/31/2011	
CD-WC-SCSOIL-53		Waste characterization sample for off-site disposal of screened soil (pile #53`	8/19/2011	SO	Mitkem	8/19/2011		8/31/2011	
CD-WC-SCSOIL-54		Waste characterization sample for off-site disposal of screened soil (pile #54`	8/19/2011	SO	Mitkem	8/19/2011		8/31/2011	
CD-A13-0-6"RR	A-13	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A13-18-24"RR	A-13	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A14-0-6"RR	A-14	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A15-0-6"RR	A-15	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A15-18-24"RR	A-15	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A16-0-6"RR	A-16	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A17-0-6"RR	A-17	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A18-0-6"RR	A-18	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-ASPH-14PCB		PCB only sample prior to off-site disposal	8/25/2011	SO	Mitkem	8/25/2011	8/30/2011	9/12/2011	
CD-ASPH-15PCB		PCB only sample prior to off-site disposal	8/25/2011	SO	Mitkem	8/25/2011	8/30/2011	9/12/2011	
CD-WC-SCSOIL-55		Waste characterization sample for off-site disposal of screened soil (pile #55`	8/31/2011	SO	Mitkem	8/31/2011		9/8/2011	
CD-WC-SCSOIL-56		Waste characterization sample for off-site disposal of screened soil (pile #56`	8/31/2011	SO	Mitkem	8/31/2011		9/8/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-ASPH-16PCB		PCB only sample prior to off-site disposal	8/31/2011	SO	Mitkem	8/31/2011	9/6/2011	9/29/2011	
CD-LTTD-DGA		Sample of DGA pile from LTTD footprint prior to use as on-site backfil	9/1/2011	SO	Mitkem	9/1/2011	9/7/2011	10/18/2011	
CD-LTTD-RED		Sample of shale/soile pile from LTTD footprint prio to use as on-site backfil	9/1/2011	SO	Mitkem	9/1/2011	9/7/2011	10/18/2011	
CD-ASPH-17PCB		PCB only sample prior to off-site disposal	9/8/2011	SO	Mitkem	9/8/2011	9/12/2011	9/29/2011	
CD-WC-ASPH-16		Waste characterization sample for off-site disposal of asphalt (pile #16)	9/13/2011	SO	Mitkem	9/13/2011		9/23/2011	
CD-B19-0-6"RR	B-19	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-B20-0-6"RR	B-20	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-B21-0-6"RR	B-21	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-C22-0-6"RR	C-22	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-C23-0-6"RR	C-23	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-WC-ASPH-15		Waste characterization sample for off-site disposal of asphalt (pile #15)	9/15/2011	SO	Mitkem	9/15/2011		9/26/2011	
CD-WC-ASPH-17		Waste characterization sample for off-site disposal of asphalt (pile #17)	9/15/2011	SO	Mitkem	9/15/2011		9/26/2011	
CD-bb3W-0-6"RR	bb-3W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-bb4W-0-6"RR	bb-4W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-ba4W-0-6"RR	ba-4W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-ba4W-18"-24"RR	ba-4W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-bb5W-0-6"RR	bb-5W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-2-FL	P-14	Floor sample in central excavation @ 6' BG. Add'l 2 excavated for PCB failure	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-1-SW	P-14	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-1-NW	P-14	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-1-WW	P-14	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P15-1-FL	P-15	Floor sample in central excavation @ 6' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P15-1-SW	P-15	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P15-1-NW	P-15	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
DUP091511	P-14	Field duplicate of sample CD-P14-1-NW	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
DUP2091511	P-15	Field duplicate of sample CD-P15-1-NW	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-WC-ASPH-14		Waste characterization sample for off-site disposal of asphalt (pile #14)	9/20/2011	SO	Mitkem	9/20/2011		9/28/2011	
CD-WC-SCSOIL-57		Waste characterization sample for off-site disposal of soil (pile #57)	9/20/2011	SO	Mitkem	9/20/2011		9/28/2011	
CD-WC-M-R28	R-28	TCLP Metals only sample post maectite treatment	9/21/2011	SO	Mitkem	9/21/2011	9/27/2011	11/9/2011	
CD-WC-M-S22	S-22	TCLP Metals only sample post maectite treatment	9/26/2011	SO	Mitkem	9/26/2011	9/29/2011	11/9/2011	
CD-WC-M-R3132	R-31 32	TCLP Metals only sample post maectite treatment	9/26/2011	SO	Mitkem	9/26/2011	9/29/2011	11/9/2011	
CD-WC-M-Q32	Q-32	TCLP Metals only sample post maectite treatment	9/26/2011	SO	Mitkem	9/26/2011	9/29/2011	11/9/2011	
CD-U20-2-FL	U-20	Floor sample in central excavation @ 8' BG. Add'l 2 excavated for PCB failure	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
CD-U20-1-WW	U-20	Sidewall sample in central excavation @ 7' BG.	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
CD-U20-1-NW	U-20	Sidewall sample in central excavation @ 7' BG.	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
DUP092711	U-20	Field duplicate of sample CD-U20-1-WW	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
CD-W20-3-WW15'	W-20	Sidewall sample in central excavation @ 15' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-V20-1-WW	V-20	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-T21-1-WW	T-21	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-S22-1-WW	S-22	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-S22-1-NW	S-22	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-S23-1-NW	S-23	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
DUP092811	T-21	Field duplicate of sample CD-T21-1-WW	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-BC3-1-FL	B/C-3	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C4-1-FL	C-4	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C5-1-FL	C-5	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C6-1-FL	C-6	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C7-1-FL	C-7	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-B4-1-FL	B-4	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-D456-1-FL	D-4,5,6	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
DUP100511	C-4	Field duplicate of sample CD-C4-1-FL	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C89-1-FL	C-8,9	Floor sample in northwestern excavation @ 0' BG.	10/6/2011	SO	Mitkem	10/6/2011	10/11/2011	11/9/2011	
CD-A7-2-FL	A-7	Floor sample in northwestern excavation @ 2' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-A7-1-WW	A-7	Sidewall sample in northwestern excavation @ 1' BG.	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-A7-1-EW	A-7	Sidewall sample in northwestern excavation @ 1' BG.	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-B9-2-FL	B-9	Floor sample in northwestern excavation @ 2' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-S23-2-NW	S-23	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-T21-2-WW	T-21	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-P20-5-NW	P-20	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/11/2011	SO	Mitkem	10/11/2011	10/14/2011	12/7/2011	
CD-WC-M-2-R3132	R-31 32	TCLP Metals only sample post maectite re-treatment	10/11/2011	SO	Mitkem	10/11/2011	10/14/2011	12/7/2011	
CD-WC-M-2-Q32	Q-32	TCLP Metals only sample post maectite re-treatment	10/11/2011	SO	Mitkem	10/11/2011	10/14/2011	12/7/2011	
CD-WC-SCSOIL-58		Waste characterization sample for off-site disposal of soil (pile #58)	10/13/2011	SO	Mitkem	10/13/2011		10/21/2011	
CD-WC-SCSOIL-59		Waste characterization sample for off-site disposal of soil (pile #59)	10/13/2011	SO	Mitkem	10/13/2011		10/21/2011	
CD-T21-3-WW	T-21	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-R25-1-NW	R-25	Sidewall sample in central excavation @ 13' BG.	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-R25-1-EW	R-25	Sidewall sample in central excavation @ 13' BG.	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-H2829-2-FL	H-2829	Floor sample in northwestern excavation @ 8' BG. Add'l 2' excavated for PCB failure	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-J29-2-FL	J-29	Floor sample in northwestern excavation @ 8' BG. Add'l 2' excavated for PCB failure	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-N26-1-FL	N-26	Floor sample in central excavation @ 8' BG. QA sample CD-N26-1-FLMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N26-1-NW	N-26	Floor sample in central excavation @ 7' BG. QA sample CD-N26-1-NWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N26-1-SW	N-26	Floor sample in central excavation @ 7' BG. QA sample CD-N26-1-SWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N26-1-WW	N-26	Floor sample in central excavation @ 7' BG. QA sample CD-N26-1-WWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-FL	N-27	Floor sample in central excavation @ 8' BG. QA sample CD-N27-1-FLMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-NW	N-27	Floor sample in central excavation @ 7' BG. QA sample CD-N27-1-NWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-SW	N-27	Floor sample in central excavation @ 7' BG. QA sample CD-N27-1-SWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-EW	N-27	Floor sample in central excavation @ 7' BG. QA sample CD-N27-1-EWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-T21-4-WW	T-21	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/20/2011	SO	Mitkem	10/20/2011	10/25/2011	12/7/2011	
CD-M28-1-FL	M-28	Floor sample in central excavation @ ~7' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-K29-2-FL	K-29	Floor sample in central excavation @ 8' BG. Add'l 2 excavated fur to VOC failure.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-K3031-2-FL	K-30 31	Floor sample in central excavation @ 8' BG. Add'l 2 excavated fur to VOC failure.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-LM34-1-FL	L/M-34	Floor sample in central excavation @ 6' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-LM34-1-EW	L/M-34	Sidewall sample in central excavation @ 5' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-L27-1-WW	L-27	Sidewall sample in central excavation @ 3' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-JK27-1-FL	J/K-27	Floor sample in central excavation @ 6' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-K27-1-WW	K-27	Sidewall sample in central excavation @ 5' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-J27-1-WW	J-27	Sidewall sample in central excavation @ 5' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-I28-1-WW	I-28	Sidewall sample in central excavation @ 4' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-H28-1-WW	H-28	Sidewall sample in central excavation @ 7' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
DUP102511	K-30 31	Field duplicate of sample CD-K3031-2-FL	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-WC-Blk-15		Waste characterization sample for off-site disposal of black material (pile #15	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-Blk-16		Waste characterization sample for off-site disposal of black material (pile #16	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-Blk-17		Waste characterization sample for off-site disposal of black material (pile #17	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-Blk-18		Waste characterization sample for off-site disposal of black material (pile #18	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-SCSOIL-60		Waste characterization sample for off-site disposal of soil/shale (pile #60	10/26/2011	SO	Mitkem	10/26/2011		11/4/2011	
CD-WC-SCSOIL-61		Waste characterization sample for off-site disposal of soil/shale (pile #61	10/26/2011	SO	Mitkem	10/26/2011		11/4/2011	
CD-WC-ASPH-18		Waste characterization sample for off-site disposal of asphalt (pile #18)	10/26/2011	SO	Mitkem	10/26/2011		11/4/2011	
CD-BF-MX-7		Sample taken off-site (@ Weldon Quarry) of DGA backfill materia	11/1/2011	SO	Mitkem	11/1/2011		12/22/2011	
CD-SA-MX-7		Sample taken off-site (@ Clayton Quarry) of Sand material for pond base	11/1/2011	SO	Mitkem	11/1/2011		12/22/2011	
CD-M31-1-FL	M-31	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-N31-1-FL	N-31	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-O31-1-FL	O-31	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-O32-1-FL	O-32	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-O33-1-FL	O-33	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
DUP110211	O-32	Field duplicate of sample CD-O32-1-FL	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-WC-M-3-R3132	R-31 32	TCLP Metals only sample post maectite re-treatment and lime treatmen	11/2/2011	SO	Mitkem	11/2/2011	11/8/2011	12/22/2011	
CD-WC-V-T26	T-26	TCLP VOCs only sample post lime treatment	11/2/2011	SO	Mitkem	11/2/2011	11/9/2011	12/22/2011	
CD-LM34-2-FL	L/M-34	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for VOC failure	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-LM34-2-EW	L/M-34	Sidewall sample in northcentral excavation @ 7' BG. Add'l 2' excavated for VOC failure	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-J27-2-WW	J-27	Sidewall sample in northcentral excavation @ 5' BG. Add'l 2' excavated for VOC failure	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-1-WW	K-29	Sidewall sample in northcentral excavation @ 9' BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-1-NW	K-29	Sidewall sample in northcentral excavation @ 9' BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-1-SW	K-29	Sidewall sample in northcentral excavation @ 9' BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-3-FL	K-29	Floor sample in northcentral excavation @ 10' BG. Add'l 2' excavated for VOC failure	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K3031-3-FL	K-30 31	Floor sample in northcentral excavation @ 10' BG. Add'l 2' excavated for VOC failure	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K30-1-SW	K-30	Sidewall sample in northcentral excavation @ 9' BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K31-1-SW	K-31	Sidewall sample in northcentral excavation @ 9' BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-WC-BLK-19		Waste characterization sample for off-site disposal of black material (pile #19	11/3/2011	SO	Mitkem	11/3/2011		11/11/2011	
CD-WC-BLK-20		Waste characterization sample for off-site disposal of black material (pile #20	11/3/2011	SO	Mitkem	11/3/2011		11/11/2011	
CD-WC-SCSOIL-62		Waste characterization sample for off-site disposal of soil/shale (pile #62	11/3/2011	SO	Mitkem	11/3/2011		11/11/2011	
CD-A7-3-FL	A-7	Floor sample in northwestern excavation @ 4' BG. Add'l 2' excavated for PCB failure	11/7/2011	SO	Mitkem	11/7/2011	11/11/2011	12/22/2011	
CD-A7-2-EW	A-7	Sidewall sample in northwestern excavation @ 3' BG. Add'l 2' excavated for PCB failure	11/7/2011	SO	Mitkem	11/7/2011	11/11/2011	12/22/2011	
CD-WC-SCSOIL-63		Waste characterization sample for off-site disposal of soil/shale (pile #63	11/7/2011	SO	Mitkem	11/7/2011		11/16/2011	
CD-WC-SCDEB-64		Waste characterization sample for off-site disposal of debris (pile #64)	11/7/2011	SO	Mitkem	11/7/2011		11/16/2011	
CD-WC-SCSOIL-65		Waste characterization sample for off-site disposal of soil/shale (pile #65	11/8/2011	SO	Mitkem	11/8/2011		11/16/2011	
CD-WC-SCSOIL-66		Waste characterization sample for off-site disposal of soil/shale (pile #66	11/8/2011	SO	Mitkem	11/8/2011		11/16/2011	
CD-O33-2-FL	O-33	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for VOC failure	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-O33-1-NW	O-33	Sidewall sample in northcentral excavation @ 7' BG.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-O33-1-EW	O-33	Sidewall sample in northcentral excavation @ 7' BG.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-O33-1-WW	O-33	Sidewall sample in northcentral excavation @ 7' BG.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-J27-3-WW	J-27	Sidewall sample in northcentral excavation @ 5' BG. Add'l 2' excavated for VOC failure	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
DUP111811	O-33	Field duplicate of sample CD-O33-2-FL	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-K29-4-FL	K-29	Floor sample in northcentral excavation @ 12' BG. Add'l 2' excavated for VOC failure	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K29-2-NW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K29-2-WW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K29-2-SW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K30-2-SW	K-30	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K31-2-SW	K-31	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
DUP112111	K-29	Field duplicate of sample CD-K29-2-SW	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-WC-SCSOIL-67		Waste characterization sample for off-site disposal of soil/shale (pile #67	11/21/2011	SO	Mitkem	11/21/2011		1/11/2012	
CD-WC-SCSOIL-68		Waste characterization sample for off-site disposal of soil/shale (pile #68	11/21/2011	SO	Mitkem	11/21/2011		1/11/2012	
CD-P30-2-FL	P-30	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for VOC failure	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-Q29-2-FL	Q-29	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for VOC failure	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-Q30-2-FL	Q-30	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for VOC failure	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-R30-1-FL	R-30	Floor sample in northcentral excavation @ 6' BG.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-R31-1-FL	R-31	Floor sample in northcentral excavation @ 6' BG.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-R32-1-FL	R-32	Floor sample in northcentral excavation @ 6' BG.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
TRENCH-BF		FIO Sample taken per USEPA direction of backfill material from trench excavatio	11/30/2011	SO	Mitkem	11/30/2011	12/5/2011	1/11/2012	
CD-R31-2-FL	R-31	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for PCB failure	12/1/2011	SO	Mitkem	12/1/2011	12/5/2011	1/11/2012	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-R31-2-FL	R-32	Floor sample in northcentral excavation @ 8' BG. Add'l 2' excavated for PCB failure	12/1/2011	SO	Mitkem	12/1/2011	12/5/2011	1/11/2012	
CD-WC-SCSOIL-69		Waste characterization sample for off-site disposal of soil/shale (pile #69)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-WC-SCSOIL-70		Waste characterization sample for off-site disposal of soil/shale (pile #70)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-WC-ASPH-19		Waste characterization sample for off-site disposal of asphalt (pile #19)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-WC-ASPH-20		Waste characterization sample for off-site disposal of asphalt (pile #20)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-K29-3-NW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	12/7/2011	SO	Mitkem	12/7/2011	12/12/2011	1/11/2012	
CD-K29-3-WW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure	12/7/2011	SO	Mitkem	12/7/2011	12/12/2011	1/11/2012	
CD-LM34-3-EW	L/M-34	Sidewall sample in northcentral excavation @ 7' BG. Add'l 2' excavated for VOC failure	12/7/2011	SO	Mitkem	12/7/2011	12/12/2011	1/11/2012	
CD-A7-4-FL	A-7	Floor sample in northwestern excavation @ 6' BG. Add'l 2' excavated for PCB failure	12/8/2011	SO	Mitkem	12/8/2011	12/13/2011	1/11/2012	
CD-WC-SCSOIL-71		Waste characterization sample for off-site disposal of soil/shale (pile #71)	12/9/2011	SO	Mitkem	12/9/2011		12/16/2011	
CD-WC-SCSOIL-72		Waste characterization sample for off-site disposal of soil/shale (pile #72)	12/9/2011	SO	Mitkem	12/9/2011		12/16/2011	
TOP-120911		Topsoil material stockpiled on-site.	12/9/2011	SO	Mitkem	12/9/2011	12/14/2011	1/19/2012	
CD-WC-TANKTAR		Waste characterization sample for off-site disposal of tar-like material found in UST	12/12/2011	SO	Mitkem	12/12/2011		1/6/2012	
CD-LM34-4-EW	L/M-34	Sidewall sample in northcentral excavation @ 7' BG. Add'l 2' excavated for VOC failure	12/13/2011	SO	Mitkem	12/13/2011	12/16/2011	1/19/2012	
CD-WC-SCSOIL-69a		Waste characterization sample for off-site disposal of soil/shale (pile #69a)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-69b		Waste characterization sample for off-site disposal of soil/shale (pile #69b)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-69c		Waste characterization sample for off-site disposal of soil/shale (pile #69c)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-69d		Waste characterization sample for off-site disposal of soil/shale (pile #69d)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCDEB-73		Waste characterization sample for off-site disposal of soil/shale/debris (pile #73)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-71a		Waste characterization sample for off-site disposal of soil/shale (pile #71a)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-SCSOIL-72a		Waste characterization sample for off-site disposal of soil/shale (pile #72a)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-SCDEB-74		Waste characterization sample for off-site disposal of soil/shale/debris (pile #74)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-SCDEB-75		Waste characterization sample for off-site disposal of soil/shale/debris (pile #75)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-ASPH-21		Waste characterization sample for off-site disposal of asphalt (pile #21)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-L35-TP	L/M-35	Test pit sampled to see if excavation is necessary after L-34 EW failures	1/10/2012	SO	Mitkem	1/10/2012	1/13/2012	2/6/2012	
CD-TOT-71A		Post Excavation sample of pile #71a (screened pile) possible on-site backfil	1/11/2012	SO	Mitkem	1/11/2012	1/16/2012	2/6/2012	
CD-TOT-72A		Post Excavation sample of pile #72a (screened pile) possible on-site backfil	1/11/2012	SO	Mitkem	1/11/2012	1/16/2012	2/6/2012	
CD-TOT-73		Post Excavation sample of pile #73 (debris pile), possible on-site backfil	1/11/2012	SO	Mitkem	1/11/2012	1/16/2012	2/6/2012	
CD-WC-LM35		Waste characterization sample for off-site disposal of in-situ grids L/M-34/35/36	1/23/2012	SO	Mitkem	1/23/2012		2/2/2012	
CD-WC-ASPH-22		Waste characterization sample for off-site disposal of asphalt (pile #22)	1/23/2012	SO	Mitkem	1/23/2012		2/2/2012	
CD-WC-ASPH-23		Waste characterization sample for off-site disposal of asphalt (pile #23)	1/23/2012	SO	Mitkem	1/23/2012		2/2/2012	
CD-WC-M-SCSOIL-69c		TCLP Metals only sample, post Maectite treatment	1/23/2012	SO	Mitkem	1/23/2012	1/26/2012	2/13/2012	
CD-WC-M-SCSOIL-69d		TCLP Metals only sample, post Maectite treatment	1/23/2012	SO	Mitkem	1/23/2012	1/26/2012	2/13/2012	
CD-WC-RR-1		Waste characterization sample for off-site disposal of railroad material (pile #1	2/23/2012	SO	Mitkem	2/23/2012		3/2/2012	
CD-WC-RR-2		Waste characterization sample for off-site disposal of railroad material (pile #2	2/23/2012	SO	Mitkem	2/23/2012		3/2/2012	
CD-BF-MX-8		Sample taken of DGA backfill material from on-site stockpile	2/23/2012	SO	Mitkem	2/23/2012		3/19/2012	
CD-BF-MX-9		Sample taken off-site (@ Weldon Quarry) of DGA backfill materia	2/23/2012	SO	Mitkem	2/23/2012		3/19/2012	
CDESS-COMFILL-001	TCLP	EME Plant, New Egypt, NJ	6/27/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	6/27/2012	7/12/2012	7/12/2012	See Report
CDESS-TOPSOIL-001	TCLP	EME Plant, New Egypt, NJ	6/27/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	6/27/2012	7/12/2012	7/12/2012	See Report
CDESS-COMFILL-002	TCLP	Weldon Quarry, Watchung, NJ (Maddox)	7/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/17/2012	8/13/2012	8/13/2012	See Report
CDESS-TOPSOIL-002	TCLP	Toll Bros Region Pit, Monroe, NJ (Maddox)	7/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/17/2012	8/13/2012	8/13/2012	See Report
CD-WC-140HVD-01-001	WC	140 Harvard Ave, Area 1	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-02-002	WC	140 Harvard Ave, Area 2	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-03-003	WC	140 Harvard Ave, Area 3	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-04-004	WC	140 Harvard Ave, Area 4	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-05-005	WC	140 Harvard Ave, Area 5	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-140HVD-06-006	PCB Only	140 Harvard Ave, Area 6	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	16.500
CD-WC-140HVD-07-007	PCB Only	140 Harvard Ave, Area 7	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	0.410
CD-WC-216DEL-01-008	WC	216 Delmore Ave, Area 1	7/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-216DEL-01-009	PCB Only	216 Delmore Ave, Area 1	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.530
CD-WC-220DEL-01-010	PCB Only	216 Delmore Ave, Area 1	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	1.570
CD-WC-605HAM-A1-011	PCB Only	605 Hamilton Blvd, Area A	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.550
CD-WC-605HAM-B1-012	PCB Only	605 Hamilton Blvd, Area B	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.590
CD-WC-605HAM-C1-013	PCB Only	605 Hamilton Blvd, Area C	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.320
CD-WC-605HAM-C2-014	PCB Only	605 Hamilton Blvd, Area C	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.380
CD-WC-605HAM-E1-015	PCB Only	605 Hamilton Blvd, Area E	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	1.480
CD-WC-108DEL-G1-016	PCB Only	108 Delmore Ave, Area G	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.350
CD-WC-108DEL-H1-017	PCB Only	108 Delmore Ave, Area H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.073
CD-WC-108DEL-H2-018	PCB Only	108 Delmore Ave, Area H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.470
CD-WC-112DEL-H3-019	PCB Only	112 Demore Ave, Area H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.257
CD-WC-605HAM-01-020	WC	605 Hamilton Blvd, Comp of Areas A-H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	See Report
CDE-OU1-1000GAR-RW1-021	PCB Only	1000 Garibaldi Ave, Right of Way, front.	10/3/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/3/2012	10/5/2012	10/23/2012	46.000
CDE-OU1-140HVD-03-022	PCBs +	140 Harvard Ave,	10/3/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/3/2012	10/5/2012	10/23/2012	0.210
CDE-OU1-GAR1000-FYR-024	PCBs +	1000 Garibaldi Ave, Front yard-Right	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/11/2012	10/23/2012	0.091
CDE-OU1-GAR1000-FYL-025	PCBs +	1000 Garibaldi Ave, Front yard-Left	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/11/2012	10/28/2012	1.570
CDE-WC-140HVD-01-026	WC	140 Harvard Ave, Area 1	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/16/2012	10/28/2012	See Report
CDE-OU1-140HVD-01-027	PCB+	140 Harvard Ave, Area 1	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/11/2012	10/23/2012	2.400
CDE-OU1-109ARL-028	PCB+	109 Arlington Ave, Back Prop Line	10/11/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/11/2012	10/19/2012	10/31/2012	24.000

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-109ARL-029	PCB+	109 Arlington Ave, Back Prop Line	10/11/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/11/2012	10/19/2012	10/31/2012	0.110
CDE-OU1-109ARL-030	PCB+	109 Arlington Ave, Back Prop Line	10/11/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/11/2012	10/19/2012	10/31/2012	1.100
CDE-OU1-112DEL-H3-031	PCB+	112 Delmore Ave, Area H3, near 108 prop line. Near corner of garage, under fence.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	0.920
CDE-OU1- 108DEL-H2-032	PBC+	108 Delmore Ave, Area H2, at front slab of garage, 12"bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	ND
CDE-OU1-140HVD-01-NW-033	PCB+	140 Harvard Ave, Area 1, North Wall, 4'bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	0.900
CDE-OU1-140HVD-01-SW-034	PCB+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	6.900
CDE-OU1-140HVD-01-WW-035	PBC+	140 Harvard Ave, Area 1, West Wall, 4'bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	0.160
CDE-OU1-140HVD-01-SW2-036	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	11.000
CDE-OU1-1000GAR-FYL-037	PBC+	1000 Garibaldi Ave, Front Yard, Left,12"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.320
CDE-OU1-1000GAR-FYL-038	PBC+	1000 Garibaldi Ave, Front Yard, Left,12"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.210
CDE-OU1-1000GAR-FYL-039	PBC+	1000 Garibaldi Ave, Front Yard, Left,24"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.051
CDE-OU1-1000GAR-FYL-040	PBC+	1000 Garibaldi Ave, Front Yard, Left,12bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.610
CDE-OU1-109ARL-041	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	2.800
CDE-OU1-140HVD-SW3-042	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/25/2012	10/29/2012	11/16/2012	1.200
CDE-OU1-140HVD-SW4-043	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/25/2012	10/29/2012	11/16/2012	4.100
CDE-OU1-140HVD-SW5-044	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/25/2012	10/29/2012	11/16/2012	1.800
CDE-OU1-140HVD-SW6-045	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	11/5/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/5/2012	11/7/2012	11/7/2012	1.750
CDE-OU1-140HVD-SW7-046	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	11/5/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/5/2012	11/7/2012	11/7/2012	0.058
CDE-OU1-109ARL-NW2-047	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	11/6/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/6/2012	11/12/2012	11/9/2012	0.490
CDE-OU1-109ARL-NW3-048	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	11/6/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/6/2012	11/12/2012	11/9/2012	0.323
CDE-OU1-109ARL-NW4-049	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	11/6/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/6/2012	11/12/2012	11/9/2012	0.112
CDE-OU1-WC-419HAN-D2-050	WC	419 Hancock St, Areas 2,3,4. 3-9"bls.	2/20/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/20/2013	NA	3/4/2013	See Report

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-WC-417HAN-C-051	WC	417-419 Hancock St., Areas C, D1. 3-9"bls.	2/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/21/2013	NA	3/4/2013	See Report
CDE-OU1-WC-413HAN-AB-052	WC	413 Hancock St., Areas A/B, 6/15"bls.	2/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/22/2013	NA	3/6/2013	See Report
CDE-OU1-WC-329HAN-B-053	WC	329 Hancock St., Areas A/B, 9/3-6"bls.	2/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/26/2013	NA	3/6/2013	See Report
CDE-OU1-WC-211NMK-D-054	WC	211 New Market Ave., Areas ABCD, 3-12"bls	2/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/26/2013	NA	3/6/2013	See Report
CDE-OU1-COMFIL-022813	TCLP	EME Plant, New Egypt, NJ	2/28/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/28/2013	NA	3/23/2013	See Report
CDE-OU1-TOPSOIL-022813	TCLP	EME Plant, New Egypt, NJ	2/28/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/28/2013	NA	3/23/2013	See Report
CDE-OU1-329HAN-BY-055	PCB+	329 Hancock St., Backyard, 2' bls.	5/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	5/15/2013	5/23/2013	6/4/2013	0.041
CDE-OU1-WC-135TRE-01-056	WC	135 Tremont Avenue, Area 1 of 3	5/29/2013	Soil	Spectrum Analytical 11 Almgren Drive Agawam, MA 01001	5/30/2013	NA	6/12/2013	See Report
CDE-OU1-WC-135TRE-02-057	WC	135 Tremont Avenue, Area 2 of 3	5/29/2013	Soil	Spectrum Analytical 11 Almgren Drive Agawam, MA 01001	5/30/2013	NA	6/12/2013	See Report
CDE-OU1-WC-135TRE-03-058	WC	135 Tremont Avenue, Area 3 of 3	5/29/2013	Soil	Spectrum Analytical 11 Almgren Drive Agawam, MA 01001	5/30/2013	NA	6/12/2013	See Report
CDE-OU1-135TRE-39EW-059	PCB+	135 Tremont Ave, Grid 39, East Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	ND
CDE-OU1-135TRE-42NW-060	PCB+	135 Tremont Ave, Grid 42, North Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	0.096
CDE-OU1-135TRE-42WW-061	PCB+	135 Tremont Ave, Grid 42, West Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	0.130
CDE-OU1-135TRE-42SW-062	PCB+	135 Tremont Ave, Grid 42, South Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	0.140
CDE-OU1-135TRE-01NW-063	PCB+	135 Tremont Ave, Grid 1, North Wall	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.210
CDE-OU1-135TRE-01SW-064	PCB+	135 Tremont Ave, Grid 1, South Wall	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.230
CDE-OU1-135TRE-02NW-065	PCB+	135 Tremont Ave, Grid 2, North Wall	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.062
CDE-OU1-135TRE-02FL-066	PCB+	135 Tremont Ave, Grid 2, Floor	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.023
CDE-OU1-135TRE-39NW-067	PCB+	135 Tremont Ave, Grid 39, North Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.080
CDE-OU1-135TRE-35SW-068	PCB+	135 Tremont Ave, Grid 35, South Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.098
CDE-OU1-135TRE-18EW-069	PCB+	135 Tremont Ave, Grid 18, East Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.180
CDE-OU1-135TRE-38WW-070	PCB+	135 Tremont Ave, Grid 38, West Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.073

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-39FL-071	PCB+	135 TremontAve, Grid 39, Floor	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	0.800
CDE-OU1-135TRE-39WW-072	PCB+	135 TremontAve, Grid 39, West Wall	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	ND
CDE-OU1-135TRE-39EW-073	PCB+	135 TremontAve, Grid 39, South Wall	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	0.120
CDE-OU1-135TRE-18I-074	PCB+	135 TremontAve, Grid 18, Informational	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	2.000
CDE-OU1-135TRE-23I-075	PCB+	135 TremontAve, Grid 23, Informational	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	1.700
CDE-OU1-135TRE-12FL-076	PCB+	135 TremontAve, Grid 12, Floor, 22"bls	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	8.300
CDE-OU1-135TRE-35NW-077	PCB+	135 TremontAve, Grid 35, North Wall, 9"b	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	ND
CDE-OU1-135TRE-35EW-078	PCB+	135 TremontAve, Grid 35, East Wall, 3"bls	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	13.000
CDE-OU1-135TRE-35FL-079	PCB+	135 TremontAve, Grid 35, Floor, 12"bls	7/17/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/17/2013	NA	7/17/2013	ND
CDE-OU1-135TRE-10FL-080	PCB+	135 TremontAve, Grid 10, Floor, 42"bls	7/17/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/17/2013	NA	7/17/2013	6.100
CDE-OU1-135TRE-11FL-081	PCB+	135 TremontAve, Grid 11, Floor, 42"bls	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	NA	7/24/2013	15.000
CDE-OU1-135TRE-12FL-082	PCB+	135 TremontAve, Grid 12, Floor, 46"bls	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	NA	7/24/2013	0.180
CDE-OU1-135TRE-16FL-083	PCB+	Sample analysis was cancelled, change in sample location. Will resample in future.	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	Analysis Cancelled	Analysis Cancelled	Analysis Cancelled
CDE-OU1-135TRE-12EW-084	PCB+	135 TremontAve, Grid 12 East Wall 42"bls	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	NA	7/24/2013	0.035
CDE-OU1-135TRE-16FL-085	PCB+	135 TremontAve, Grid 16 Floor 36" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	2.100
CDE-OU1-135TRE-16NW-086	PCB+	135 TremontAve, Grid 16 N. Wall 42" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.940
CDE-OU1-135TRE-36NW-087	PCB+	135 TremontAve, Grid 36 N. Wall, 6" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.340
CDE-OU1-135TRE-36SW-088	PCB+	135 TremontAve, Grid 36 S. Wall, 6" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.033
CDE-OU1-135TRE-18FL-089	PCB+	135 TremontAve, Grid 18 Floor, 20" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.042
CDE-OU1-135TRE-12SW-090	PCB+	135 TremontAve, Grid 12 S. Wall, 28" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	ND
CDE-OU1-135TRE-18SW-091	PCB+	135 TremontAve, Grid 18 S. Wall, 12" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.084
CDE-OU1-135TRE-23EW-092	PCB+	135 TremontAve, Grid 23 E. Wall, 14" bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	0.250

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-23SW-093	PCB+	135 TremontAve, Grid 23 S. Wall, 14" bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	ND
CDE-OU1-135TRE-11SW-094	PCB+	135 Tremont Ave, Grid 11 S. Wall, 30"bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	0.260
CDE-OU1-135TRE-12NW-095	PCB+	135 Tremont Ave, Grid 12 N.Wall, 28"bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	ND
CDE-OU1-135TRE-16EW-096	PCB+	135 Tremont Ave, Grid 16 E. Wall, 36"bls	7/29/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/29/2013	NA	7/31/2013	ND
CDE-OU1-135TRE-10NW-097	PCB+	135 Tremont Ave, Grid 10 N. Wall, 40"bls	7/29/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/29/2013	NA	7/31/2013	ND
CDE-OU1-135TRE-11NW-098	PCB+	135 Tremont Ave, Grid 11 N. Wall, 40"bls	7/29/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/29/2013	NA	7/31/2013	19.000
CDE-OU1-135TRE-6NW-099	PCB+	135 Tremont Ave, Grid 6 N. Wall, 12"bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	0.260
CDE-OU1-135TRE-6EW-100	PCB+	135 Tremont Ave, Grid 6 E. Wall, 12"bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	ND
CDE-OU1-135TRE-11/5NWW-101	PCB+	135 Tremont Ave, Grid 11/5 N. Wall-West, 40" bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	ND
CDE-OU1-135TRE-11/5NWE-102	PCB+	135 Tremont Ave, Grid 11/5 N. Wall-East, 40" bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	0.034
CDE-OU1-135TRE-5NW-103	PCB+	135 Tremont Ave, Grid 5 N. Wall, 12" bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	0.250
CDE-OU1-135TRE-3NW-104	PCB+	135 Tremont Ave, Grid 3 N. Wall, 6"bls	8/5/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/5/2013	8/7/2013	8/8/2013	5.000
CDE-OU1-135TRE-4NW-105	PCB+	135 Tremont Ave, Grid 4 N. Wall, 6"bls	8/5/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/5/2013	8/7/2013	8/8/2013	0.130
CDE-OU1-135TRE-10WW-106	PCB+	135 Tremont Ave, Grid 10 W. Wall, 36"bls	8/5/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/5/2013	8/7/2013	8/8/2013	5.200
CDE-OU1-135TRE-11/5NWW-107	PCB+	Cancelled	8/5/2013	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled
CDE-OU1-135TRE-8WW-108	PCB+	135 Tremont Ave, Grid 8 W. Wall, 9"bls	8/6/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/6/2013	NA	8/8/2013	0.160
CDE-OU1-135TRE-8SW-109	PCB+	135 Tremont Ave, Grid 8 S. Wall, 9"bls	8/6/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/6/2013	NA	8/8/2013	0.100
CDE-OU1-135TRE-24SW-110	PCB+	135 Tremont Ave, Grid 24 S. Wall, 12"bls	8/6/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/6/2013	NA	8/8/2013	0.110
CDE-OU1-135TRE-8FL-111	PCB+	135 Tremont Ave, Grid 8 Floor, 18"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.070
CDE-OU1-135TRE-15FL-112	PCB+	135 Tremont Ave, Grid 15 Floor, 18"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.057
CDE-OU1-135TRE-15WW-113	PCB+	135 Tremont Ave, Grid 15 W. Wall, 9'bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.500
CDE-OU1-135TRE-15/16WW-114	PCB+	135 Tremont Ave, Grid 15/16 W. Wall, 40"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.056
CDE-OU1-135TRE-22FL-115	PCB+	Cancelled	8/7/2013	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled
CDE-OU1-135TRE-22SW-116	PCB+	135 Tremont Ave, Grid 22 S. Wall, 22"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	7.300

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-9/10WW-117	PCB+	135 Tremont Ave, Grid 9/10 W. Wall 36"bls	8/8/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/8/2013	NA	8/12/2013	ND
CDE-OU1-135TRE-19NW-118	PCB+	135 Tremont Ave, Grid 19 N. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-19SW-119	PCB+	135 Tremont Ave, Grid19 S. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.036
CDE-OU1-135TRE-19WW-120	PCB+	135 Tremont Ave, Grid 19 W. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.021
CDE-OU1-135TRE-19FL-121	PCB+	135 Tremont Ave, Grid 19 Floor, 14"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-20NW-122	PCB+	135 Tremont Ave, Grid 20 N. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.052
CDE-OU1-135TRE-20SW-123	PCB+	135 Tremont Ave, Grid 20 S. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.028
CDE-OU1-135TRE-20FL-124	PCB+	135 Tremont Ave, Grid 20 Floor, 14"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-21SW-125	PCB+	135 Tremont Ave, Grid 21 S. Wall, 10"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-22SWext-126	PCB+	135 Tremont Ave, Grid 22 S. Wall extention, 20"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.140
CDE-OU1-135TRE-22EWext-127	PCB+	135 Tremont Ave, Grid 22 E. Wall extention, 20"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.110
CDE-OU1-135TRE-22WWext-128	PCB+	135 Tremont Ave, Grid 22 W. Wall extention, 20"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.600
CDE-OU1-135TRE-27EW-129	PCB+	135 Tremont Ave, Grid 27 E. Wall, 6"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.550
CDE-OU1-135TRE-27WW-130	PCB+	135 Tremont Ave, Grid 27 W. Wall, 6"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.130
CDE-OU1-NM1-A12-131	PCB+	New Market Ave. Right of Way, Fig. 1, Area A, 12"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	10/21/2013	NA	10/24/2013	ND
CDE-OU1-NM1-A18-132	PCB+	New Market Ave. Right of Way, Fig. 1, Area A, 18"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	HOLD			
CDE-OU1-NM1-B12-133	PCB+	New Market Ave. Right of Way, Fig. 1, Area B, 12"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	10/21/2013	NA	10/24/2013	ND
CDE-OU1-NM1-B18-134	PCB+	New Market Ave. Right of Way, Fig. 1, Area B, 18"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	HOLD			
CDE-OU1-NM1-C12-135	PCB+	New Market Ave. Right of Way, Fig. 1, Area C, 12"bls	10/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	10/22/2013	NA	10/25/2013	0.210
CDE-OU1-NM1-C18-136	PCB+	New Market Ave. Right of Way, Fig. 1, Area C, 18"bls	10/22/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-D12-137	PCB+	New Market Ave. Right of Way, Fig. 1, Area D, 12"bls	10/22/2013	Soil	Mitkem Labs 646 Camp	10/23/2013	NA	10/25/2013	0.290
CDE-OU1-NM1-D18-138	PCB+	New Market Ave. Right of Way, Fig. 1, Area D, 18"bls	10/22/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-E12-139	PCB+	New Market Ave. Right of Way, Fig. 1, Area E, 12"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/23/2013		10/28/2013	1.200
CDE-OU1-NM1-E18-140	PCB+	New Market Ave. Right of Way, Fig. 1, Area E, 18"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	0.100
CDE-OU1-NM1-F12-141	PCB+	New Market Ave. Right of Way, Fig. 1, Area F, 12"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/23/2013		10/28/2013	2.600
CDE-OU1-NM1-F18-142	PCB+	New Market Ave. Right of Way, Fig. 1, Area F, 18"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	1.400
CDE-OU1-NMROW-143	WC	New Market Ave. ROW Waste Characterization composite sample	10/24/2013	Soil	Mitkem Labs 646 Camp				
CDE-OU1-NM1-G12-144	PCB+	New Market Ave. Right of Way, Fig. 1, Area G, 12"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	0.240

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anavtical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-NM1-G18-145	PCB+	New Market Ave. Right of Way, Fig. 1, Area G, 12"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-H12-146	PCB+	New Market Ave. Right of Way, Fig. 1, Area H, 12"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	1.400
CDE-OU1-NM1-H18-147	PCB+	New Market Ave. Right of Way, Fig. 1, Area H, 18"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	11/4/2013		11/7/2013	0.790
CDE-OU1-NM1-I12-148	PCB+	New Market Ave. Right of Way, Fig. 1, Area I, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	2.200
CDE-OU1-NM1-I18-149	PCB+	New Market Ave. Right of Way, Fig. 1, Area I, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-J12-150	PCB+	New Market Ave. Right of Way, Fig. 1, Area J, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	0.620
CDE-OU1-NM1-J18-151	PCB+	New Market Ave. Right of Way, Fig. 1, Area J, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM2-A12-152	PCB+	New Market Ave. Right of Way, Fig. 2, Area A, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	2.400
CDE-OU1-NM2-A18-153	PCB+	New Market Ave. Right of Way, Fig. 2, Area A, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.640
CDE-OU1-NM2-B12-154	PCB+	New Market Ave. Right of Way, Fig. 2, Area B, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	0.390
CDE-OU1-NM2-B18-155	PCB+	New Market Ave. Right of Way, Fig. 2, Area B, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM2-C12-156	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.120
CDE-OU1-NM2-C18-157	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM2-D12-158	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.170
CDE-OU1-NM2-D18-159	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM3-A12-160	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.180
CDE-OU1-NM3-A18-161	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM3-B12-162	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.560
CDE-OU1-NM3-B18-163	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-F24-164	PCB+	New Market Ave. Right of Way, Fig. 1, Area F, 24"bls	11/4/2013	Soil	Mitkem Labs 646 Camp	11/4/2013		11/7/2013	1.100
CDE-OU1-NM4-A12-165	PCB+	New Market Ave. Right of Way, Fig. 4, Area A, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.084
CDE-OU1-NM4-A18-166	PCB+	New Market Ave. Right of Way, Fig. 4, Area A, 18"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM4-B12-167	PCB+	New Market Ave. Right of Way, Fig. 4, Area B, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.170
CDE-OU1-NM4-B18-168	PCB+	New Market Ave. Right of Way, Fig. 4, Area B, 18"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM4-C12-169	PCB+	New Market Ave. Right of Way, Fig. 4, Area C, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.067
CDE-OU1-NM4-C18-170	PCB+	New Market Ave. Right of Way, Fig. 4, Area C, 18"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM4-D12-171	PCB+	New Market Ave. Right of Way, Fig. 4, Area D, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.270
CDE-OU1-NM4-D18		**18" AUGER REFUSAL @ 14"**	11/5/2013						
CDE-OU1-NM1-I12-172	PCB+	New Market Ave. Right of Way, Fig. 1, Area I, 12"bls (**CORRECTED LOCATION**)	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/7/2013	0.057
CDE-OU1-NM1-J12-173	PCB+	New Market Ave. Right of Way, Fig. 1, Area J, 12"bls (**CORRECTED LOCATION**)	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/7/2013	0.150

Cornell Dubilier Electronics Superfund Contract No. W912DQ-04-D-0023 TO. 0011
LTTD TRACKING LOG

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
Commenced SES feeding 2" screened material, Maxymillian feeding 1 1/4"																			
11/13/2009	2	78.2								CD-PT-02-111309	11/17/2009	425	28	11/19/2009	12/20/2009	--	Failed	0	78.2
11/16/2009	1	203	16.4	1134-0600	12.36	51.50%	Repair broken 3" pvc water line in treatment building	13.5	599.07	CD-PT-01-11609	11/17/2009	364	26	11/19/2009	12/20/2009	--	Failed	0	281.2
11/17/2009	3	337.9	14.1	600-600	24	100.00%		14.6	670.04	CD-PT-03-111709	11/18/2009	220	5.9	11/20/2009	12/20/2009	--	**Passed**	337.9	281.2
11/18/2009	4	254.1	15.0	600-0457	16.95	70.63%	600 amp main breaker not continues duty tripped out	16.3	632.68	CD-PT-04-111809	11/19/2009	412	26	11/20/2009	12/20/2009	--	Failed	337.9	535.3
11/19/2009	5	62	15.8	0700-1056	3.93	16.38%	600 amp main breaker not continues duty tripped out	16.1	612.66	CD-PT-05-111909	11/20/2009	617	5.1	11/23/2009	12/20/2009	--	**Passed**	399.9	535.3
11/20/2009	6	265.3	12.2	0812-0600	21.8	90.83%	Late start due to 600 amp breaker. Changing over some elec. Items to lesson the load	16.7	678.32	CD-PT-06-112009	11/21/2009	214	20.5	11/23/2009	12/20/2009	--	Failed	399.9	800.6
11/21/2009	7	81.7	13.6	0600-1201	6.01	25.04%	End of week shutdown	15.8	681.18	CD-PT-07-112109	11/23/2009	730	1.6	11/24/2009	12/20/2009	--	**Passed**	481.6	800.6
11/23/2009	8	165.2	8.7	2145-1643	18.95	78.96%	Scheduled AM maintenance	16.0	680.72	CD-PT-08-112309	11/24/2009	495	6.6	11/30/2009	12/20/2009	--	**Passed**	646.8	800.6
11/24/2009 & 11/25/2009	9	202.5	11.7	1643-1031	17.36	72.33%	Shut down for the Holiday	16.0	680.32	CD-PT-09-112409	11/25/2009	684	12.1	11/30/2009	1/6/2010	Yes	Failed	646.8	1003.1
11/30/2009	10	29.7	4.0	2226-0600	7.48	31.17%	Scheduled AM maintenance	10.0	641.49	CD-PT-10-113009	12/1/2009	360	11.7	12/2/2009	1/6/2010	--	Failed	646.8	1032.8
Switched lab extraction method from 3570 to 3550																			
12/1/2009	11	296.1	12.3	0330-0600	24	100.00%		10.0	721.66	CD-PT-11-120109	12/2/2009	359	2.1	12/3/2009	1/6/2010	--	**Passed**	942.9	1032.8
12/2/2009	12	289.1	12.0	0600-0600	24	100.00%		10.0	720.78	CD-PT-12-120209	12/3/2009	669	9.9	12/4/2009	1/6/2010	--	**Passed**	1232	1032.8
12/3/2009	13	253.1	12.3	0600-0600	20.55	85.63%	Jacking conv. Belt replacement	13.0	721.83	CD-PT-13-120309	12/4/2009	327.1	4	12/7/2009	1/19/2010	Yes	**Passed**	1485.1	1032.8
Commenced SES and Maxymillian feeding 1" screened material																			
12/4/2009	14	189.9	10.6	0600-0600	17.95	74.79%	Finish jacking conv repair	13.0	731.14	CD-PT-14-120409	12/5/2009	227	6.9	12/7/2009	1/19/2010	Yes	**Passed**	1675	1032.8
12/5/2009	15	75.3	11.2	0600-1242	6.7	27.92%	End of week shutdown	13.0	733.4	CD-PT-15-120509	12/8/2009	244	1.3	12/9/2009	1/19/2010	--	**Passed**	1750.3	1032.8
Commenced SES feeding 1" material, Maxymillian feeding 3/4" screened material																			
12/7/2009 & 12/8/2009	16	340.2	11.6	1835-0600	29.39	61.23%	Scheduled AM maintenance. High quench level stopped feed to lower level	13	733	CD-PT-16-120709	12/9/2009	241	6.3	12/10/2009	1/19/2010	Yes	**Passed**	2090.5	1032.8
12/9/2009	17	277.7	11.8	0600-0600	23.48	97.83%	main breaker tripped	12.5	730	CD-PT-17-120909	12/10/2009	203	10.8	12/12/2009	1/19/2010	Yes	Failed	2090.5	1310.5
12/10/2009	18	200.2	10.5	0600-0600	19.05	79.38%	Feed screen was up against the wall removed ramp and pulled screen back and tied to 2 deadmen	12.7	750	CD-PT-18-121009	12/11/2009	278	ND	12/14/2009	1/19/2010	Yes	**Passed**	2290.7	1310.5
12/11/2009	19	301.9	12.6	0600-0600	24	100.00%		12.9	733	CD-PT-19-121109	12/12/2009	444	ND	12/14/2009	1/19/2010	Yes	**Passed**	2592.6	1310.5
12/12/2009	20	298.6	12.4	0600-0600	24	100.00%		13.7	736	CD-PT-20-121209	12/14/2009	584	1.4	12/15/2009	1/19/2010	Yes	**Passed**	2891.2	1310.5
12/13/2009	21	78.4	12.4	0600-1220	6.33	26.38%	End of week shutdown	11.9	726	CD-PT-21-121309	12/14/2009	497	3.4	12/15/2009	1/19/2010	Yes	**Passed**	2969.6	1310.5
12/14/2009	22	54	11.2	1650-0600	4.53	18.88%	Scheduled AM maintenance	14.3	715	CD-PT-22-121409	12/15/2009	456	ND	12/16/2009	1/19/2010	Yes	**Passed**	3023.6	1310.5
12/16/2009	23	92.8	14.6	747-1400	6.21	--	No pile generated 12/15 due to shutdown. Pile 23 @ 15 tons/hr	14.1	738	CD-PT-23-121509	12/16/2009	722	0.74	12/17/2009	1/19/2010	Yes	**Passed**	3116.4	1310.5
12/16/2009	24	200.6	12.2	1400-0600	16.45	94.42%	Pile 24 @ 12 tons/hr	13.9	740	CD-PT-24-121609	12/17/2009	432	1.2	12/19/2009	1/19/2010	Yes	**Passed**	3317	1310.5
12/17/2009	25	315.2	13.2	0600-0600	23.75	98.96%	Frozen H2O lines	15.9	749	CD-PT-25-121709	12/18/2009	467	26	12/21/2009	1/19/2010	Yes	Failed	--	--
Pile 25 re-sampled directly from pile due to possible jar contamination. Four composite samples were taken from different areas of the pile.																			
12/17/2009	25	315.2	13.2	0600-0600	23.75	98.96%	Frozen H2O lines	15.9	749	CD-PT-25-121709	1/6/2010	467	8.9, 7.9, 3.6, 8.8	1/8/2010	1/28/2010	Yes	**Passed**	3632.2	1310.5
12/18/2009	26	290.4	13.4	0600-0600	24	100.00%		14.6	740	CD-PT-26-121809	12/19/2009	445	280	12/21/2009	1/19/2010	Yes	Failed	--	--
Pile 26 re-sampled, first sample was taken from the incorrect jar.																			
12/18/2009	26	290.4	13.4	0600-0600	24	100.00%		14.6	740	CD-PT-26-121809	12/21/2009	445	ND	12/22/2009	1/19/2010	Yes	**Passed**	3922.6	1310.5
12/19/2009	27	322.8	13.4	0600-0600	24	100.00%		15.2	751	CD-PT-27-121909	12/21/2009	255	ND	12/22/2009	1/19/2010	Yes	**Passed**	4245.4	1310.5
12/20/2009	28	148.5	13.4	0600-1655	10.91	45.46%	End of week shutdown	15.2	745	CD-PT-28-122009	12/21/2009	428	ND	12/22/2009	1/19/2010	Yes	**Passed**	4393.9	1310.5

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
12/21/2009 & 12/22/2009	29	389.7	14.2	2250-0600	27.4	57.08%	Scheduled AM maintenance	15.2	749	CD-PT-29-122209	12/23/2009	242	0.63	12/31/2009	1/19/2010	--	**Passed**	4783.6	1310.5
12/23/2009	30	235.4	14.2	0600-2315	17.25	71.88%	Holiday shutdown	15.2	734	CD-PT-30-122309	12/24/2009	51.9	ND	12/31/2009	1/19/2010	--	**Passed**	5019	1310.5
1/5/2010	31	269.4	14.4	1152-0600	18.13	75.54%	Scheduled AM maintenance	14.5	730	CD-PT-31-010510	1/6/2010	123	3.3	1/7/2010	1/28/2010	--	**Passed**	5288.4	1310.5
1/6/2010	32	368.1	15.4	0600-0600	24	100.00%		13.8	735	CD-PT-32-010610	1/7/2010	89.9	3.6	1/8/2010	1/28/2010	--	**Passed**	5656.5	1310.5
1/7/2010	33	358.5	14.9	0600-0600	24	100.00%		13	744	CD-PT-33-010710	1/8/2010	36.7	1.59	1/11/2010	1/28/2010	--	**Passed**	6015	1310.5
Commenced SES feeding 1" material, Maxymillian feeding 1" screened material																			
1/8/2010 - 1/10/2010	34	155.1	14.9	0600(1/8)-0240(1/10)	10.85	15.07%	Baghouse rotary airlock bound up	13	745	CD-PT-34-010810	1/11/2010	78.7	0.72	1/12/2010	1/28/2010	--	**Passed**	6170.1	1310.5
1/11/2010	35	163.7	15.8	1955-0600	10.08	42.00%	Scheduled AM maintenance	13	750.4	CD-PT-35-011110	1/12/2010	87.7	3.5	1/13/2010	1/28/2010	--	**Passed**	6333.8	1310.5
1/12/2010	36	319.4	15.27	0600-0600	21	--		12.6	745.36	CD-PT-36-011210	1/13/2010	48.2	3.5	1/14/2010	1/28/2010	--	**Passed**	6653.2	1310.5
1/12/2010	37	48.8	16.46	1500-1800	3	100.00%	Three hour run at higher soil feed rate	10.8	715.25	CD-PT-37-011210	1/13/2010	29.4	5.8	1/14/2010	1/28/2010	--	**Passed**	6702	1310.5
1/13/2010	38	365.7	15.8	0600-0600	24	100.00%		13	750.4	CD-PT-38-011310	1/14/2010	16.7	0.97	1/15/2010	1/28/2010	--	**Passed**	7067.7	1310.5
Commenced SES feeding 1" material, Maxymillian feeding 3/4" screened material																			
1/14/2010	39	313.5	13.24	0600-0550	20.17	84.04%	Change bearings on jacking conveyor	13.5	709.56	CD-PT-39-011410	1/15/2010	29.2	ND	1/18/2010	1/28/2010	Yes	**Passed**	7381.2	1310.5
1/15/2010	40	325.5	13.95	0600-0600	22	91.67%	Calciner drive tripped	13	744.46	CD-PT-40-011510	1/16/2010	21.7	ND	1/18/2010	1/28/2010	--	**Passed**	7706.7	1310.5
1/16/2010	41	178.3	12.85	0600-1900	13	54.17%	End of week shutdown	13	740.85	CD-PT-41-011610	1/18/2010	33.2	3.4	1/19/2010	2/10/2010	--	**Passed**	7885	1310.5
1/19/2010	42	333	14.27	0717-0600	22.72	94.67%	Scheduled AM maintenance	13.5	724.61	CD-PT-42-011910	1/20/2010	39.6	3.1	1/21/2010	2/10/2010	--	**Passed**	8218	1310.5
1/20/2010	43	364	15.21	0600-0600	24	100.00%		13.5	749.17	CD-PT-43-012010	1/21/2010	37.9	3.1	1/22/2010	2/10/2010	Yes	**Passed**	8582	1310.5
1/21/2010	44	359.7	15.09	0600-0600	23.58	98.25%	Vaporizer flame for propane failed	13.5	745	CD-PT-44-012110	1/22/2010	42.7	2.4	1/25/2010	2/10/2010	Yes	**Passed**	8941.7	1310.5
1/22/2010	45	303.5	14.1	0600-0600	20.77	86.54%	Change bearings on jacking conveyor	14	734.5	CD-PT-45-012210	1/23/2010	33.25	4.4	1/25/2010	2/10/2010	--	**Passed**	9245.2	1310.5
1/23/2010	46	332.7	13.9	0600-0600	24	100.00%		13.9	755.6	CD-PT-46-012310	1/25/2010	27.92	0.59	1/26/2010	2/23/2010	--	**Passed**	9577.9	1310.5
1/24/2010	47	287.1	12	0600-0600	22.52	93.83%	Change bearings on jacking conveyor	15.5	745.05	CD-PT-47-012410	1/25/2010	19.32	0.76	1/26/2010	2/23/2010	--	**Passed**	9865	1310.5
Commenced SES feeding 1" material, Maxymillian feeding 1" screened material																			
1/25/2010	48	205.9	10.5	0600-0600	17.58	73.25%	Fix excavator in feed building, bag house maintenance, switch screens	14.5	763.7	CD-PT-48-012510	1/26/2010	21.71	ND	1/27/2010	2/23/2010	--	**Passed**	10070.9	1310.5
1/26/2010	49	231.1	12.6	0600-0600	18.25	--	Switch to pile 50 midday for test run	16	750.5	CD-PT-49-012610	1/27/2010	12.5	1.7	1/28/2010	2/23/2010	--	**Passed**	10302	1310.5
1/26/2010	50	81	14	1450-2035	5.75	100.00%	Test run crushed shale	15.5	739.3	CD-PT-50-012610	1/27/2010	26.4 (MT) 130 (SES)	1.3	1/28/2010	2/23/2010	--	**Passed**	10383	1310.5
1/27/2010	51	327.5	13.6	0600-0600	24	100.00%		15	745.9	CD-PT-51-012710	1/28/2010	44.9	1.1	1/29/2010	2/23/2010	--	**Passed**	10710.5	1310.5
1/28/2010	52	332	13	0600-0600	24	100.00%		14	744	CD-PT-52-012810	1/29/2010	42.1	ND	2/1/2010	2/23/2010	--	**Passed**	11042.5	1310.5
1/29/2010 & 1/30/2010	53	182.1	11	0600-1010	13.17	25.24%	Installing new silo fan and repairing silo bucket elevator	12	717	CD-PT-53-012910	2/1/2010	45.1	ND	2/2/2010	3/1/2010	--	**Passed**	11224.6	1310.5
1/31/2010	54	285.5	14.3	1010-0600	19.83	100.00%	Conveyor was swung @ 1010 due to frozen soil around base of conveyor	13.7	741.7	CD-PT-54-013110	2/1/2010	42.9	1.61	2/2/2010	3/1/2010	--	**Passed**	11510.1	1310.5
2/1/2010	55	258.7	13.9	0600-0600	17.78	74.08%	Repairing face seal to calciner	12	720	CD-PT-55-020110	2/2/2010	56.1	1.32	2/3/2010	3/1/2010	--	**Passed**	11768.8	1310.5
2/2/2010	56	325.1	13.7	0600-0600	23.33	97.21%	Plant shut down to replace shaker belts	12	744	CD-PT-56-020210	2/3/2010	50	ND	2/4/2010	3/1/2010	--	**Passed**	12093.9	1310.5
Commenced SES feeding 1" material, Maxymillian feeding 3/4" screened material																			
2/3/2010	57	292.1	14.5	0600-0600	20	--		12	731	CD-PT-57-020310	2/4/2010	33.36	ND	2/5/2010	3/1/2010	--	**Passed**	12386	1310.5
2/3/2010	58	63	15.4	1530-1930	4	100.00%	Pile 58 was a test run at lower temperature	12	709	CD-PT-58-020310	2/4/2010	24.55	0.67	2/5/2010	3/1/2010	--	**Passed**	12449	1310.5
Commenced SES feeding 1" material, Maxymillian feeding 1" screened material																			
2/4/2010	59	354.9	14.8	0600-0600	24	100.00%		13.6	743	CD-PT-59-020410	2/5/2010	21.1	ND	2/8/2010	3/1/2010	--	**Passed**	12803.9	1310.5
2/5/2010	60	132.7	13.6	0600-1540	9.67	40.29%	Replaced auger	13.6	751	CD-PT-60-020510	2/6/2010	39.7	0.56	2/8/2010	3/1/2010	--	**Passed**	12936.6	1310.5
2/6/2010	61	312.2	14.1	0830-0600	21.5	89.58%		13.6	733	CD-PT-61-020610	2/8/2010	0.74	ND	2/9/2010	3/1/2010	--	**Passed**	13248.8	1310.5
2/7/2010	62	330.4	13.8	0600-0600	24	100.00%		13.6	745	CD-PT-62-020710	2/8/2010	41.9	0.66	2/9/2010	3/1/2010	--	**Passed**	13579.2	1310.5
2/8/2010	63	341.1	14.1	0600-0600	24	100.00%		13.6	745	CD-PT-63-020810	2/9/2010	40.4	0.77	2/10/2010	3/1/2010	--	**Passed**	13920.3	1310.5
2/9/2010	64	183.7	15.2	0600-0435	13.07	54.46%	Performed maintenance and cleaning of auger	10.8	724	CD-PT-64-020910	2/10/2010	48.1	ND	2/12/2010	3/1/2010	--	**Passed**	14104	1310.5

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
2/10/2010	65	337.8	16.6	0807-0600	20.25	84.38%	Performed maintenance and cleaning of auger	10.3	672.1	CD-PT-65-021010	2/11/2010	32.27	1.1	2/12/2010	3/1/2010	--	**Passed**	14441.8	1310.5
2/11/2010 & 2/12/2010	66	429	16.4	0600-1153 & 0944-0600	26.15	54.48%		9.5	672	CD-PT-66-021110	2/13/2010	34.8	0.91	2/16/2010	3/1/2010	--	**Passed**	14870.8	1310.5
2/13/2010	67	383.1	15.7	0600-0600	24	100.00%		10.8	681	CD-PT-67-021310	2/15/2010	18.08	0.63	2/16/2010	3/12/2010	--	**Passed**	15253.9	1310.5
2/14/2010	68	375.2	15.6	0600-0600	23.17	96.54%	Power failure and burner failure caused 50 minutes in total shutdown time	9.5	688.8	CD-PT-68-021410	2/15/2010	64.9	3.8	2/16/2010	3/12/2010	--	**Passed**	15629.1	1310.5
2/15/2010	69	366.5	15.95	0600-0600	24	100.00%		10.4	702.2	CD-PT-69-021510	2/16/2010	110.4	3.6	2/17/2010	3/12/2010	--	**Passed**	15995.6	1310.5
2/16/2010	70	368.1	16.69	0600-0426	22.43	93.46%	Pugmill bearing replacement, and replacement of silo paddles	11.5	697.8	CD-PT-70-021610	2/17/2010	35.8	2.9	2/18/2010	3/12/2010	--	**Passed**	16363.7	1310.5
2/17/2010 & 2/18/2010	71	459.3	15.09	2345-0600	30.25	63.02%	Pugmill bearing replacement, and replacement of silo paddles	11.5	689.6	CD-PT-71-021710	2/19/2010	26.31	3.3	2/22/2010	3/12/2010	--	**Passed**	16823	1310.5
2/19/2010	72	350.3	15.23	0600-0505	23.08	96.17%		11.5	715.7	CD-PT-72-021910	2/20/2010	26.1	ND	2/22/2010	3/12/2010	--	**Passed**	17173.3	1310.5
2/20/2010	73	221.8	14.08	0916-0600	15.77	65.71%	Baghouse and Quench @ high temp, lines and valves plugged up	11.5	740.6	CD-PT-73-022010	2/22/2010	29	ND	2/23/2010	4/1/2010	--	**Passed**	17395.1	1310.5
2/21/2010	74	368.2	15.48	0600-0600	23.75	98.96%	Burners reset	11.5	729	CD-PT-74-022110	2/22/2010	86.6	ND	2/23/2010	4/1/2010	--	**Passed**	17763.3	1310.5
2/22/2010	75	341.8	14.25	0600-0600	24	100.00%		11.5	740.6	CD-PT-75-022210	2/23/2010	182.3	ND	2/24/2010	4/1/2010	Yes	**Passed**	18105.1	1310.5
2/23/2010	76	293.3	13.1	0600-0600	22.4	93.33%	High Baghouse Differential Pressure and Burner shutdown due to overheating	11.5	737.9	CD-PT-76-022310	2/24/2010	78.6	1.3	2/25/2010	4/1/2010	--	**Passed**	18398.4	1310.5
2/24/2010 & 2/25/2010	77	296.3	12.4	0600-2330	23.18	48.29%	High Baghouse DP and Burner shutdown. Performed maintenance.	11.3	734.4	CD-PT-77-022510	2/27/2010	213	6	3/1/2010	4/1/2010	--	**Passed**	18694.7	1310.5
2/26/2010	78	301.2	12.7	0617-0600	23.72	98.83%		11.3	735.7	CD-PT-78-022610	2/27/2010	454	10.5	3/1/2010	4/1/2010	Yes	Failed	18694.7	1611.7
2/27/2010	79	258	12.3	0600-0522	20.82	86.75%	High Baghouse DP and high Baghouse temperature. Repair Quench lines.	13.8	729.4	CD-PT-79-022710	3/1/2010	349.6	6.3	3/2/2010	4/14/2010	Yes	**Passed**	18952.7	1611.7
2/28/2010	80	303.2	14.4	0803-0600	21.95	91.46%	Repair Quench lines	13.8	722.3	CD-PT-80-022810	3/1/2010	264.2	7.3	3/2/2010	4/14/2010	--	**Passed**	19255.9	1611.7
Commenced SES feeding 1" material, Maxymillian feeding 3/4" screened material																			
3/1/2010 & 3/2/2010	81	171	13.1	0600-0600	12.42	25.88%	Shutdown to enter bag house and perform maintenance	12.9	743.3	CD-PT-81-030110	3/3/2010	365	1.1	3/4/2010	4/14/2010	--	**Passed**	19426.9	1611.7
3/3/2010	82	338.6	14.1	0600-0600	24	100.00%		12.9	742.1	CD-PT-82-030310	3/4/2010	672	6.2	3/5/2010	4/14/2010	Yes	**Passed**	19765.5	1611.7
3/4/2010	83	283.4	12.2	0600-0600	22.97	95.71%	Shutdown to install air compressor cooling tube for baghouse	12.9	750.4	CD-PT-83-030410	3/5/2010	373	4.1	3/8/2010	4/14/2010	No	**Passed**	20048.9	1611.7
3/5/2010	84	238.5	10.7	0600-0600	21.87	91.13%	Change rear calciner seal	12.9	734.6	CD-PT-84-030510	3/8/2010	619	3.4	3/9/2010	4/16/2010	Yes	**Passed**	20287.4	1611.7
3/6/2010	85	275.9	11.5	0600-0600	24	100.00%		12.9	743.3	CD-PT-85-030610	3/8/2010	1110	5.2	3/9/2010	4/16/2010	No	**Passed**	20563.3	1611.7
3/8/2010 - 3/10/2010	87	276.2	12.8	0600-0600	21.19	29.43%	Lack of negative pressure on calciner face, performed maintenance activities	11.5	732	CD-PT-87-030810	3/11/2010	1776	5.4	3/12/2010	4/16/2010	Yes	**Passed**	21113.7	1611.7
3/11/2010	88	290.7	12.6	0600-0600	22.07	91.96%	Quench pipe leaking	11.4	732	CD-PT-88-031110	3/12/2010	415	ND	3/15/2010	4/16/2010	No	**Passed**	21404.4	1611.7
3/12/2010	89	303.4	13.4	0600-0600	22.96	95.67%	Changed out discharge pugmill hydraulic motor	11.4	741	CD-PT-89-031210	3/13/2010	998	5.9	3/15/2010	4/16/2010	No	**Passed**	21707.8	1611.7
3/13/2010	90	263.6	13.8	0600-0600	21.65	90.21%	Tripped breakers caused 3 shutdowns	11.4	697	CD-PT-90-031310	3/15/2010	592	14	3/16/2010	5/5/2010	No	Failed	21707.8	1875.3
3/14/2010	91	195.4	13.9	0600-0600	15.48	64.50%	Replace paddles in pugmill	11.5	680	CD-PT-91-031410	3/15/2010	622	6.5	3/16/2010	5/5/2010	No	**Passed**	21903.2	1875.3
3/15/2010 - 3/18/2010	92	246	12.9	0600-2345	21.08	21.96%	Various maintenance activities and electric failure caused shutdowns	11.3	712	CD-PT-92-031510	3/18/2010	795	9.5	3/19/2010	5/17/2010	No	**Passed**	22149.2	1875.3
3/19/2010 - 3/23/2010	93	255.6	14.3	2020-0600	17.67	14.73%	Various maintenance activities and electric failure caused shutdowns	11.4	739.6	CD-PT-93-031910	3/24/2010	600	3.6	3/25/2010	5/17/2010	No	**Passed**	22404.8	1875.3
3/24/2010	94	297.7	12.3	0600-0600	24	100.00%		12.3	747	CD-PT-94-032410	3/25/2010	694	ND	3/26/2010	5/17/2010	No	**Passed**	22702.5	1875.3
Pile 95 was the re-treatment of Pile 78																			
3/25/2010	95	137	13.3	0600-1644	10.28	--	High Baghouse Differential Pressure	11.4	745.5	CD-PT-95-032510	3/25/2010	73.9	ND	3/26/2010	5/17/2010	No	**Passed**	22839.5	1875.3
3/25/2010	96	138.2	11.1	1644-0510	12.43	94.63%	problems with overspray quench	11.4	756	CD-PT-96-032510	3/26/2010	194	4.1	3/30/2010	5/17/2010	No	**Passed**	22977.7	1875.3
3/26/2010	97	255.4	11.7	0806-0600	21.9	91.25%	problems with overspray quench	11.4	748	CD-PT-97-032610	3/27/2010	199.6	2.7	3/29/2010	5/17/2010	No	**Passed**	23233.1	1875.3
3/27/2010	98	244.5	10.6	0600-0600	23.4	97.50%	High Baghouse Differential Pressure	11.4	747	CD-PT-98-032710	3/29/2010	153.5	3.2	3/30/2010	5/28/2010	No	**Passed**	23477.6	1875.3

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
3/28/2010	99	240.5	10	0600-0600	24	100.00%		12.5	749	CD-PT-99-032810	3/29/2010	221.4	5.8	3/30/2010	5/28/2010	No	**Passed**	23718.1	1875.3
3/29/2010	100	220.3	10.3	0600-0600	21.27	88.63%	Lost draft on faceplate in calciner	14.5	746	CD-PT-100-032910	3/30/2010	194.7	3.2	3/31/2010	5/28/2010	No	**Passed**	23938.4	1875.3
3/30/2010	101	157.1	10.8	0600-0700	14.37	57.48%	Working on pugmill feed area	13.8	747	CD-PT-101-033010	3/31/2010	113.8	5.8	4/1/2010	5/28/2010	No	**Passed**	24095.5	1875.3
3/31/2010	102	50.7	15.5	0700-1045	3.47	92.53%	Lost burners. Pile 102 was a 3 hr 45 min test run of POP test material	12.4	720	CD-PT-102-033110	3/31/2010	215	11.1	4/1/2010	5/28/2010	No	Failed	24095.5	1926
3/31/2010	103	200.9	11.1	1045-0600	18.02	93.61%	Changing out EMO unit	14.3	750	CD-PT-103-033110	4/1/2010	152.9	1.7	4/5/2010	5/28/2010	No	**Passed**	24296.4	1926
4/1/2010	104	255.2	10.7	0600-0600	24	100.00%		14.8	749	CD-PT-104-040110	4/2/2010	273.9	10.8	4/5/2010	5/28/2010	No	Failed	24296.4	2181.2
4/2/2010	105	150.8	10.3	0600-0013	15.98	--	Shutdown for maintenance prior to POP test week	14.8	746	CD-PT-105-040210	4/2/2010	212.9	5.6	4/5/2010	5/28/2010	No	**Passed**	24447.2	2181.2
4/2/2010	106	39.6		1125-1439	3.23	80.04%	Pile 106 was a 3 hour 14 minute test run with POP test material			CD-PT-106-040210	4/3/2010	534	11.6	4/5/2010	5/28/2010	No	Failed	24447.2	2220.8
4/6/2010 & 4/7/2010	107	78.7	12.8	0948-2050	6.13	--	POP Week pile	12.8	748	CD-PT-107-040610	4/8/2010	482	1.6	4/9/2010		No	**Passed**	24525.9	2220.8
Piles 108-110 were POP test runs 1-3																			
4/6/2010	108	44		1130-2045	3.33	--	POP Test Run 1. Condenser Temp high			CD-PT-108-040610	4/7/2010		0.76	4/9/2010		No	**Passed**	24569.9	2220.8
4/7/2010	109	43.4		0945-1302	3.28	--	POP Test Run 2			CD-PT-109-040710	4/7/2010		ND	4/9/2010		No	**Passed**	24613.3	2220.8
4/7/2010	110	42		1730-2042	3.2	--	POP Test Run 3			CD-PT-110-040710	4/8/2010		3.5	4/9/2010		No	**Passed**	24655.3	2220.8
4/10/2010	111	108.1	13.1	2217-0600	7.72	32.17%	Resume Normal operations	13.3	757	CD-PT-111-041010	4/12/2010	232.9	4.9	4/13/2010	6/14/2010	No	**Passed**	24763.4	2220.8
4/11/2010	112	299.3	12.6	0600-0600	22.91	95.46%	Condenser frozen, changed out and resumed feed	13.3	744	CD-PT-112-041110	4/12/2010	171.4	4.6	4/13/2010	6/14/2010	No	**Passed**	25062.7	2220.8
4/12/2010	113	301.9	12.7	0600-0600	23.55	98.13%	Airlock need maintenance	13.2	753	CD-PT-113-041210	4/13/2010	303	3.1	4/14/2010	6/14/2010	No	**Passed**	25364.6	2220.8
4/13/2010	114	304.9	12.7	0600-0600	24	100.00%		11.7	749	CD-PT-114-041310	4/14/2010	480	6.7	4/15/2010	6/14/2010	No	**Passed**	25669.5	2220.8
Maxymillian noted sheen in the lead carbon vessel the oil/water seperator may have had solids/silt that plugged an outlet causing the oil to overflow to the carbon vessel. Maxymillian has corrected the issue.																			
4/14/2010	115	268.3	11.5	0600-0600	23.22	96.75%	Baghouse Differential Pressure high	13.3	749	CD-PT-115-041410	4/15/2010	564	13.2	4/16/2010	6/14/2010	No	Failed	25669.5	2489.1
4/15/2010	116	262.7	10.9	0600-0600	23.57	98.21%	Baghouse Differential Pressure high	11.7	757	CD-PT-116-041510	4/16/2010	484	11.8	4/19/2010	6/14/2010	No	Failed	25669.5	2751.8
4/16/2010	117	182.8	12.2	0600-0600	15.95	66.46%	Replacing Pugmill Paddles	11.7	762	CD-PT-117-041610	4/17/2010	379	8.4	4/19/2010	6/14/2010	No	**Passed**	25852.3	2751.8
4/17/2010	118	311.9	12.9	0600-0600	24	100.00%		11.7	751	CD-PT-118-041710	4/19/2010	499	4.9	4/20/2010	6/2/2010	No	**Passed**	26164.2	2751.8
4/18/2010	119	177.6	13.1	0600-1940	13.67	56.96%	Changing out baghouse filter bags	11.7	748	CD-PT-119-041810	4/19/2010	359	5.2	4/20/2010	6/2/2010	Yes	**Passed**	26341.8	2751.8
4/21/2010	120	176.1	11.1	1421-0600	15.65	21.74%	Changing out baghouse filters, cleaned out water treatment system.	11.9	757	CD-PT-120-042110	4/22/2010	648	1.2	4/26/2010	6/2/2010	No	**Passed**	26517.9	2751.8
4/22/2010	121	274.1	11.4	0600-0600	24	100.00%		12.2	766	CD-PT-121-042210	4/23/2010	368	3.2	4/27/2010	6/2/2010	No	**Passed**	26792	2751.8
4/23/2010	122	276.3	11.5	0600-0600	24	100.00%		11.3	766	CD-PT-122-042310	4/24/2010	408	3.3	4/27/2010	6/2/2010	No	**Passed**	27068.3	2751.8
4/24/2010	123	274.5	11.4	0600-0600	24	100.00%		11.3	763	CD-PT-123-042410	4/26/2010	546	1.4	4/27/2010	6/4/2010	No	**Passed**	27342.8	2751.8
4/25/2010	124	275.5	11.5	0600-0600	24	100.00%		11.3	761	CD-PT-124-042510	4/26/2010	367	ND	4/27/2010	6/4/2010	No	**Passed**	27618.3	2751.8
4/26/2010	125	281.4	11.7	0600-0600	24	100.00%		11.8	764	CD-PT-125-042610	4/27/2010	261	3	4/29/2010	6/4/2010	No	**Passed**	27899.7	2751.8
4/27/2010	126	278.5	11.6	0600-0600	24	100.00%		11.5	754	CD-PT-126-042710	4/28/2010	300	1.12	4/30/2010	6/4/2010	No	**Passed**	28178.2	2751.8
4/28/2010	127	225.5	11.5	0600-0600	19.45	81.04%	Maintenance to pugmill and discharge auger	11.8	766	CD-PT-127-042810	4/29/2010	186.4	2.4	4/30/2010	6/4/2010	No	**Passed**	28403.7	2751.8
4/29/2010	128	276.8	11.5	0600-0600	24	100.00%		11.8	759	CD-PT-128-042910	4/30/2010	690	5.3	5/5/2010	6/4/2010	No	**Passed**	28680.5	2751.8
4/30/2010	129	275.6	11.5	0600-0600	24	100.00%		11.5	757	CD-PT-129-043010	5/1/2010	402	4.8	5/5/2010	6/4/2010	No	**Passed**	28956.1	2751.8
5/1/2010	130	277.3	11.5	0600-0600	24	100.00%		11.5	759	CD-PT-130-050110	5/3/2010	367	1.8	5/5/2010	6/8/2010	No	**Passed**	29233.4	2751.8
5/2/2010	131	270.1	11.2	0600-0600	24	100.00%		12.3	702	CD-PT-131-050210	5/3/2010	480	1.65	5/5/2010	6/8/2010	No	**Passed**	29503.5	2751.8
5/3/2010	132	196.5	11.1	0600-0600	17.7	73.75%	Replaced drive motor in pugmill	12.3	724	CD-PT-132-050310	5/4/2010	256	2.3	5/6/2010	6/8/2010	No	**Passed**	29700	2751.8
5/4/2010	133	274.3	11.5	0600-0600	24	100.00%		11.8	719	CD-PT-133-050410	5/5/2010	267	3.7	5/7/2010	6/8/2010	No	**Passed**	29974.3	2751.8
5/5/2010	134	277.1	11.6	0600-0600	24	100.00%		11.8	713	CD-PT-134-050510	5/6/2010	224.2	3.7	5/10/2010	6/8/2010	No	**Passed**	30251.4	2751.8
5/6/2010	135	276.2	11.6	0600-0600	24	100.00%		11.5	728	CD-PT-135-050610	5/7/2010	366	2.8	5/10/2010	6/8/2010	No	**Passed**	30527.6	2751.8
5/7/2010	136	273.5	11.4	0600-0600	24	100.00%		11.2	723	CD-PT-136-050710	5/8/2010	273.7	4.2	5/10/2010	6/8/2010	No	**Passed**	30801.1	2751.8
5/8/2010	137	270.5	11.4	0600-0600	23.63	98.46%	Main Breaker Tripped	12.1	764	CD-PT-137-050810	5/10/2010	231.2	2.6	5/11/2010	6/15/2010	No	**Passed**	31071.6	2751.8
5/9/2010	138	204.7	11.5	0600-0600	17.83	74.29%	Replacing Pugmill Paddles	12.8	757	CD-PT-138-050910	5/10/2010	199.2	2.9	5/11/2010	6/15/2010	No	**Passed**	31276.3	2751.8
5/10/2010	139	277.2	11.9	0600-0600	23.2	96.67%	Replaced discharge conveyor motor	11.8	754	CD-PT-139-051010	5/11/2010	144.3	5.6	5/13/2010	6/15/2010	No	**Passed**	31553.5	2751.8
5/11/2010	140	287.8	11.9	0600-0600	24	100.00%		11.4	748	CD-PT-140-051110	5/12/2010	220.7	5.3	5/13/2010	6/15/2010	No	**Passed**	31841.3	2751.8

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
5/12/2010	141	283.9	12	0600-0600	24	100.00%		12.7	757	CD-PT-141-051210	5/13/2010	272	4	5/17/2010	6/15/2010	Yes	**Passed**	32125.2	2751.8
5/13/2010	142	176.2	12	0600-0600	14.85	61.88%	Repairing a leak in the quench and replacing Pugmill Paddles	11.5	749	CD-PT-142-051310	5/17/2010	347	5.1	5/18/2010	6/21/2010	Yes	**Passed**	32301.4	2751.8
5/14/2010 - 5/16/2010	143	74.9	11.8	0600-0600	6.25	8.68%	Refractory blocks failed, causing outside of furnace to overheat	11.8	755	CD-PT-143-051410	5/17/2010	285	2.09	5/18/2010	6/21/2010	Yes	**Passed**	32376.3	2751.8
5/17/2010	144	287	11.9	0600-0600	24	100.00%		11.5	757	CD-PT-144-051710	5/18/2010	247.9	2.8	5/19/2010	6/21/2010	No	**Passed**	32663.3	2751.8
5/18/2010	145	289.5	12	0600-0600	24	100.00%		10.9	757	CD-PT-145-051810	5/19/2010	209.5	1.09	5/20/2010	6/21/2010	No	**Passed**	32952.8	2751.8
5/19/2010	146	290.2	12.1	0600-0600	24	100.00%		10.9	755	CD-PT-146-051910	5/20/2010	183.8	2.7	5/21/2010	6/21/2010	Yes	**Passed**	33243	2751.8
5/20/2010	147	290.4	12	0600-0600	24	100.00%		10.9	757	CD-PT-147-052010	5/21/2010	303	2.1	5/24/2010	6/21/2010	Yes	**Passed**	33533.4	2751.8
5/21/2010	148	289.2	12	0600-0600	24	100.00%		11.5	759	CD-PT-148-052110	5/22/2010	305	3.1	5/24/2010	6/21/2010	No	**Passed**	33822.6	2751.8
5/22/2010	149	289	12	0600-0600	24	100.00%		12.0	759	CD-PT-149-052210	5/24/2010	156.6	2.9	5/25/2010	6/22/2010	No	**Passed**	34111.6	2751.8
5/23/2010	150	291.9	12.1	0600-0600	24	100.00%		12.0	753	CD-PT-150-052310	5/24/2010	137	3.2	5/25/2010	6/22/2010	Yes	**Passed**	34403.5	2751.8
5/24/2010	151	295.7	12.3	0600-0600	24	100.00%		12.8	758	CD-PT-151-052410	5/25/2010	80.5	2.3	5/26/2010	6/22/2010	Yes	**Passed**	34699.2	2751.8
5/25/2010	152	280.5	12.3	0600-0600	24	100.00%		12.7	762	CD-PT-152-052510	5/26/2010	91.3	1.77	5/28/2010	6/22/2010	No	**Passed**	34979.7	2751.8
5/26/2010	153	298.4	12.4	0600-0600	24	100.00%		11.9	757	CD-PT-153-052610	5/27/2010	122.7	3.2	5/28/2010	6/22/2010	No	**Passed**	35278.1	2751.8
5/27/2010	154	292.7	12.4	0600-0600	23.33	97.21%	Lost combustion blower	11.9	757	CD-PT-154-052710	5/28/2010	176.3	5.6	6/2/2010	6/22/2010	No	**Passed**	35570.8	2751.8
5/28/2010	155	292.7	12.2	0600-0600	24	100.00%		12.1	754	CD-PT-155-052810	5/29/2010	161.6	3.1	6/2/2010	6/22/2010	No	**Passed**	35863.5	2751.8
5/29/2010	156	287.9	12	0600-0600	24	100.00%		12	762	CD-PT-156-052910	6/1/2010	90	ND	6/2/2010	6/24/2010	No	**Passed**	36151.4	2751.8
5/30/2010	157	287.1	12	0600-0600	24	100.00%		11.9	755	CD-PT-157-053010	6/1/2010	162.8	ND	6/2/2010	6/24/2010	No	**Passed**	36438.5	2751.8
5/31/2010	158	239.2	11.6	0600-0600	20.25	84.38%	Power failure, switched to generator power	11.9	758	CD-PT-158-053110	6/1/2010	107.6	ND	6/2/2010	6/24/2010	No	**Passed**	36677.7	2751.8
6/1/2010	159	130.4	11.6	0600-0600	11.03	45.96%	Power loss	11.9	762	CD-PT-159-060110	6/2/2010	147.8	3.4	6/3/2010	6/24/2010	No	**Passed**	36808.1	2751.8
6/2/2010	160	184	11.8	0600-0600	16.57	69.04%	Power loss	12.6	766	CD-PT-160-060210	6/3/2010	123.6	1.66	6/4/2010	6/24/2010	No	**Passed**	36992.1	2751.8
6/3/2010	161	284.8	11.8	0600-0600	24	100.00%		12.1	754	CD-PT-161-060310	6/4/2010	93.7	1.5	6/7/2010	6/24/2010	No	**Passed**	37276.9	2751.8
6/4/2010	162	282.3	11.9	0600-0600	23.48	97.83%	Maintenance on the discharge auger	12.1	757	CD-PT-162-060410	6/5/2010	120.1	2.2	6/7/2010	6/24/2010	No	**Passed**	37559.2	2751.8
6/5/2010	163	289.5	12	0600-0600	24	100.00%		12.2	760	CD-PT-163-060510	6/7/2010	129.1	1.35	6/8/2010	7/16/2010	No	**Passed**	37848.7	2751.8
6/6/2010	164	289.1	12	0600-0600	24	100.00%		12.1	762	CD-PT-164-060610	6/7/2010	151.6	1.96	6/8/2010	7/16/2010	No	**Passed**	38137.8	2751.8
6/7/2010	165	296.9	12.3	0600-0600	24	100.00%		12.1	757	CD-PT-165-060710	6/8/2010	25.9	1.89	6/9/2010	7/16/2010	No	**Passed**	38434.7	2751.8
6/8/2010	166	299.9	12.5	0600-0600	24	100.00%		12.4	757	CD-PT-166-060810	6/9/2010	114.5	ND	6/10/2010	7/16/2010	No	**Passed**	38734.6	2751.8
6/9/2010	167	296.4	12.4	0600-0600	24	100.00%		11.9	758	CD-PT-167-060910	6/10/2010	47.2	1.3	6/11/2010	7/16/2010	Yes	**Passed**	39031	2751.8
6/10/2010 - 6/12/2010	168	367.2	12.3	0600-0600	29.62	41.14%	Pugmill shaft broke, replacement onsite. Repaired calciner face seal.	11.9	756	CD-PT-168-061010	6/14/2010	126.9	2.1	6/15/2010	7/22/2010	No	**Passed**	39398.2	2751.8
6/13/2010	169	300.2	12.5	0600-0600	24	100.00%		12.4	757	CD-PT-169-061310	6/14/2010	88.5	1.6	6/15/2010	7/22/2010	No	**Passed**	39698.4	2751.8
6/14/2010	170	310.4	13	0600-0600	24	100.00%		12.4	758	CD-PT-170-061410	6/15/2010	61.9	2.5	6/16/2010	7/22/2010	No	**Passed**	40008.8	2751.8
6/15/2010	171	311.9	13	0600-0600	24	100.00%		11.4	759	CD-PT-171-061510	6/16/2010	132.2	1.52	6/17/2010	7/22/2010	No	**Passed**	40320.7	2751.8
6/16/2010	172	307.2	13	0600-0600	23.77	99.04%	Propane valve tripped	11.9	758	CD-PT-172-061610	6/17/2010	125.5	ND	6/18/2010	7/22/2010	Yes	**Passed**	40627.9	2751.8
6/17/2010	173	302.5	13	0600-0515	23.25	96.88%	Maintenance on PM equipment	11.9	759	CD-PT-173-061710	6/18/2010	23.21	ND	6/21/2010	7/22/2010	Yes	**Passed**	40930.4	2751.8
6/18/2010	174	191.6	13.1	1525-0600	14.58	60.75%	Continued maintenance and housekeeping	11.9	756	CD-PT-174-061810	6/19/2010	30.4	ND	6/21/2010	7/22/2010	No	**Passed**	41122	2751.8
6/19/2010	175	313.6	13	0600-0600	24	100.00%		11.6	763	CD-PT-175-061910	6/21/2010	27.3	ND	6/22/2010	7/28/2010	Yes	**Passed**	41435.6	2751.8
6/20/2010	176	312.5	13	0600-0600	24	100.00%		11.9	761	CD-PT-176-062010	6/21/2010	41.9	ND	6/22/2010	7/28/2010	Yes	**Passed**	41748.1	2751.8
6/21/2010	177	313.2	13	0600-0600	24	100.00%		11.6	759	CD-PT-177-062110	6/22/2010	36.8	ND	6/23/2010	7/28/2010	No	**Passed**	42061.3	2751.8
6/22/2010	178	288.7	13.1	0600-0600	22.9	95.42%	Power failures	11.6	758	CD-PT-178-062210	6/23/2010	76.8	ND	6/24/2010	7/28/2010	No	**Passed**	42350	2751.8
6/23/2010	179	317.3	13.2	0600-0600	24	100.00%		11.3	745	CD-PT-179-062310	6/24/2010	60	ND	6/25/2010	7/28/2010	No	**Passed**	42667.3	2751.8
6/24/2010	180	322.6	13.4	0600-0600	24	100.00%		11.6	745	CD-PT-180-062410	6/25/2010	61.1	ND	6/28/2010	7/28/2010	Yes	**Passed**	42989.9	2751.8
6/25/2010	181	319.2	13.3	0600-0600	23.78	99.08%	Install a shim in calciner	11.6	761	CD-PT-181-062510	6/26/2010	64.4	ND	6/28/2010	7/28/2010	No	**Passed**	43309.1	2751.8
6/26/2010	182	321.9	13.4	0600-0600	24	100.00%		11.9	760	CD-PT-182-062610	6/28/2010	54	ND	6/29/2010	7/28/2010	No	**Passed**	43631	2751.8
6/27/2010	183	318.7	13.2	0600-0600	24	100.00%		11.9	762	CD-PT-183-062710	6/28/2010	46.9	ND	6/29/2010	7/28/2010	No	**Passed**	43949.7	2751.8
6/28/2010	184	316	13.1	0600-0600	24	100.00%		11.6	759	CD-PT-184-062810	6/29/2010	51.4	1.28	6/30/2010	7/28/2010	Yes	**Passed**	44265.7	2751.8
6/29/2010	185	319.1	13.3	0600-0600	24	100.00%		11.9	760	CD-PT-185-062910	6/30/2010	87.1	2.5	7/1/2010	7/28/2010	No	**Passed**	44584.8	2751.8
6/30/2010	186	318.8	13.2	0600-0600	24	100.00%		10.6	760	CD-PT-186-063010	7/1/2010	110.8	2.8	7/2/2010	7/28/2010	No	**Passed**	44903.6	2751.8

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
7/1/2010	187	318.8	13.2	0600-0600	24	100.00%		11.6	752	CD-PT-187-070110	7/2/2010	103.6	2.4	7/6/2010	7/28/2010	No	**Passed**	45222.4	2751.8
7/2/2010	188	322.5	13.5	0600-0600	24	100.00%		11.4	760	CD-PT-188-070210	7/3/2010	124.9	2.2	7/6/2010	7/28/2010	Yes	**Passed**	45544.9	2751.8
7/3/2010	189	239.2	12.8	0600-0038	18.63	77.63%	Shutdown for July 4th holiday	11.6	751	CD-PT-189-070310	7/6/2010	137	2.9	7/7/2010	8/2/2010	Yes	**Passed**	45784.1	2751.8
7/7/2010	190	158.2	11.7	1537-0600	13.3	55.42%		12.2	756	CD-PT-190-070710	7/8/2010	230	0.7	7/8/2010	8/2/2010	Yes	**Passed**	45942.3	2751.8
7/8/2010	191	190	11.3	0600-2238	16.63	69.29%	Problems with breaker causing	12.2	750	CD-PT-191-070810	7/9/2010	160.7	1.66	7/12/2010	8/2/2010	No	**Passed**	46132.3	2751.8
7/9/2010	192	174.7	11.5	1450-0600	15.17	63.21%	condenser temperature to rise. Chiller	12.2	734	CD-PT-192-070910	7/10/2010	130.8	1.79	7/12/2010	8/2/2010	No	**Passed**	46307	2751.8
7/10/2010	193	273.2	11.4	0600-0600	24	100.00%		12.4	737	CD-PT-193-071010	7/12/2010	119.8	1.2	7/13/2010	8/4/2010	No	**Passed**	46580.2	2751.8
7/11/2010	194	263.5	11	0600-0600	24	100.00%		12.6	751	CD-PT-194-071110	7/12/2010	172	2.11	7/13/2010	8/4/2010	No	**Passed**	46843.7	2751.8
7/12/2010	195	264.8	11.4	0600-0513	23.22	96.75%	Ran out of propane	12.2	744	CD-PT-195-071210	7/13/2010	108.3	0.58	7/14/2010	8/4/2010	No	**Passed**	47108.5	2751.8
7/13/2010	196	268.5	11.7	0700-0600	23	95.83%		12.2	750	CD-PT-196-071310	7/14/2010	1171.4	1.8	7/15/2010	8/4/2010	No	**Passed**	47377	2751.8
7/14/2010	197	268.9	11.2	0600-0600	24	100.00%		11.6	749	CD-PT-197-071410	7/15/2010	277.9	0.57	7/16/2010	8/4/2010	No	**Passed**	47645.9	2751.8
7/15/2010	198	293.3	12.2	0600-0600	24	100.00%		11.3	750	CD-PT-198-071510	7/16/2010	132.9	1.36	7/19/2010	8/4/2010	No	**Passed**	47939.2	2751.8
7/16/2010	199	305.2	12.7	0600-0600	24	100.00%		11.8	748	CD-PT-199-071610	7/17/2010	167.4	1.64	7/19/2010	8/4/2010	No	**Passed**	48244.4	2751.8
7/17/2010	200	257.7	12.4	0600-0600	20.67	86.13%	Shutdown due to hydraulic hose failure	11.6	756	CD-PT-200-071710	7/19/2010	179.8	ND	7/20/2010	8/11/2010	No	**Passed**	48502.1	2751.8
7/18/2010	201	237.5	12.2	0600-0127	19.45	81.04%	Repairing pugmill auger	11.6	749	CD-PT-201-071810	7/19/2010	141.7	ND	7/20/2010	8/11/2010	No	**Passed**	48739.6	2751.8
7/19/2010	202	136.7	11.8	0650-0600	12.45	51.88%	Gerhart on-site to perform scale calibration, continued repairs on auger	11.7	759	CD-PT-202-071910	7/20/2010	477	1.18	7/21/2010	8/11/2010	No	**Passed**	48876.3	2751.8
7/20/2010	203	268.7	11.2	0600-0600	24	100.00%		10.6	752	CD-PT-203-072010	7/21/2010	303	1.44	7/22/2010	8/11/2010	No	**Passed**	49145	2751.8
7/21/2010	204	260.4	10.8	0600-0600	24	100.00%		11.3	755	CD-PT-204-072110	7/22/2010	283.6	2.09	7/23/2010	8/11/2010	Yes	**Passed**	49405.4	2751.8
7/22/2010	205	251.7	10.7	0600-0528	23.47	97.79%	Shutdown due to burner blowout and	11.6	752	CD-PT-205-072210	7/23/2010	260.3	3.3	7/26/2010	8/11/2010	No	**Passed**	49657.1	2751.8
7/23/2010 & 7/24/2010	206	369.0	11.3	2112-0600	32.8	68.33%	broken shaft on discharge pugmill	10.1	757	CD-PT-206-072310	7/26/2010	361	2.0	7/27/2010	8/16/2010	No	**Passed**	50026.1	2751.8
7/25/2010	207	265.0	11	0600-0600	24	100.00%		11.6	750	CD-PT-207-072510	7/26/2010	240.6	1.27	7/27/2010	8/16/2010	No	**Passed**	50291.1	2751.8
7/26/2010	208	262.4	10.9	0600-0600	24	100.00%		11.5	755	CD-PT-208-072610	7/27/2010	320	1.12	7/28/2010	8/16/2010	Yes	**Passed**	50553.5	2751.8
7/27/2010	209	147	12.3	0600-0245	13.72	57.17%	Performed maintenance. Replaced	11.6	762	CD-PT-209-072710	7/28/2010	486	3.1	7/29/2010	8/16/2010	No	**Passed**	50700.5	2751.8
7/28/2010	210	278.5	12.6	0748-0600	22.2	92.50%	induced draft fan.	12.0	758	CD-PT-210-072810	7/29/2010	269.6	2.5	7/30/2010	8/16/2010	Yes	**Passed**	50979	2751.8
7/29/2010	211	309.4	12.8	0600-0600	24	100.00%		11.0	758	CD-PT-211-072910	7/30/2010	394	1.94	8/2/2010	8/16/2010	No	**Passed**	51288.4	2751.8
7/30/2010	212	318.4	13.2	0600-0600	24	100.00%		11.6	759	CD-PT-212-073010	7/31/2010	130.1	ND	8/2/2010	8/16/2010	No	**Passed**	51606.8	2751.8
7/31/2010	213	321.5	13.3	0600-0600	23.85	99.38%	Main breaker tripped	10.6	762	CD-PT-213-073110	8/2/2010	90.7	ND	8/3/2010	9/2/2010	No	**Passed**	51928.3	2751.8
8/1/2010	214	325.9	13.56	0600-0600	24	100.00%		10.6	758	CD-PT-214-080110	8/2/2010	115.5	ND	8/3/2010	9/2/2010	Yes	**Passed**	52254.2	2751.8
8/2/2010	215	323.6	13.4	0600-0600	24	100.00%		10.0	755	CD-PT-215-080210	8/3/2010	69.3	ND	8/4/2010	9/2/2010	No	**Passed**	52577.8	2751.8
8/3/2010	216	103.3	13.4	0600-1237	6.32	26.33%	Propane lines froze, change fan motor	9.3	751	CD-PT-216-080310	8/4/2010	132	ND	8/5/2010	9/2/2010	No	**Passed**	52681.1	2751.8
8/4/2010 & 8/5/2010	217	456.2	14.1	2140-0600	26.33	54.85%		10.0	752	CD-PT-217-080410	8/6/2010	128	1.33	8/9/2010	9/2/2010	No	**Passed**	53137.3	2751.8
8/6/2010	218	340.3	14.1	0600-0600	24	100.00%		10.0	761	CD-PT-218-080610	8/7/2010	160.6	ND	8/9/2010	9/2/2010	No	**Passed**	53477.6	2751.8
8/7/2010	219	341.3	14.2	0600-0600	24	100.00%		10.1	759	CD-PT-219-080710	8/9/2010	92.5	ND	8/10/2010	9/3/2010	No	**Passed**	53818.9	2751.8
8/8/2010	220	337.3	14.1	0600-0600	23.87	99.46%	Pugmill breaker tripped, suspended feed for 8 minutes	10.3	764	CD-PT-220-080810	8/9/2010	120.5	ND	8/10/2010	9/3/2010	No	**Passed**	54156.2	2751.8
8/9/2010	221	338.0	14.1	0600-0600	24	100.00%		10.0	755	CD-PT-221-080910	8/10/2010	98.8	ND	8/11/2010	9/3/2010	No	**Passed**	54494.2	2751.8
8/10/2010	222	338.4	14.1	0600-0600	24	100.00%		10.3	755	CD-PT-222-081010	8/11/2010	89.1	ND	8/12/2010	9/3/2010	No	**Passed**	54832.6	2751.8
8/11/2010	223	341.1	14.2	0600-0600	24	100.00%		10.3	751	CD-PT-223-081110	8/12/2010	121.3	ND	8/13/2010	9/3/2010	No	**Passed**	55173.7	2751.8
8/12/2010	224	306.6	14.3	0600-0324	21.4	89.17%	Discharge Pugmill jammed, replaced and	9.8	758	CD-PT-224-081210	8/13/2010	59.7	ND	8/16/2010	9/3/2010	No	**Passed**	55480.3	2751.8
8/13/2010	225	242.8	14.5	1305-0600	16.92	70.50%	restarted feed	10.0	755	CD-PT-225-081310	8/14/2010	46.4	ND	8/16/2010	9/3/2010	No	**Passed**	55723.1	2751.8
8/14/2010	226	343.1	14.3	0600-0600	24	100.00%		10.3	753	CD-PT-226-081410	8/16/2010	168.5	ND	8/17/2010	9/16/2010	No	**Passed**	56066.2	2751.8
8/15/2010	227	342.3	14.2	0600-0600	24	100.00%		10.0	750	CD-PT-227-081510	8/16/2010	74.4	ND	8/17/2010	9/16/2010	No	**Passed**	56408.5	2751.8
8/16/2010	228	338.8	14.2	0600-0600	24	100.00%		10.0	753	CD-PT-228-081610	8/17/2010	76.8	ND	8/18/2010	9/16/2010	No	**Passed**	56747.3	2751.8
8/17/2010	229	341.7	14.2	0600-0600	24	100.00%		11.6	749	CD-PT-229-081710	8/18/2010	153.4	ND	8/19/2010	9/16/2010	No	**Passed**	57089	2751.8
8/18/2010	230	339.9	14.2	0600-0600	24	100.00%		11.0	750	CD-PT-230-081810	8/19/2010	94.6	ND	8/20/2010	9/16/2010	No	**Passed**	57428.9	2751.8
8/19/2010	231	339	14.3	0600-0600	24	100.00%		11.1	753	CD-PT-231-081910	8/20/2010	67.1	ND	8/23/2010	9/16/2010	No	**Passed**	57767.9	2751.8
8/20/2010	232	333.6	13.9	0600-0600	24	100.00%		11.5	756	CD-PT-232-082010	8/21/2010	137.6	1.91	8/23/2010	9/16/2010	No	**Passed**	58101.5	2751.8
8/21/2010	233	341.2	14.2	0600-0600	24	100.00%		11.6	753	CD-PT-233-082110	8/23/2010	79.9	1.83	8/24/2010	9/23/2010	No	**Passed**	58442.7	2751.8

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
8/22/2010	234	343.6	14.3	0600-0600	24	100.00%		11.1	754	CD-PT-234-082210	8/23/2010	130.3	ND	8/24/2010	9/23/2010	No	**Passed**	58786.3	2751.8
8/23/2010	235	234.3	14.2	0600-0600	16.48	68.67%	Replacing pugmill paddles and broken pugmill shaft	11.6	753	CD-PT-235-082310	8/24/2010	113.4	ND	8/25/2010	9/23/2010	No	**Passed**	59020.6	2751.8
8/24/2010	236	341.5	14.2	0600-0600	24	100.00%		11.1	752	CD-PT-236-082410	8/25/2010	98.1	ND	8/26/2010	9/23/2010	No	**Passed**	59362.1	2751.8
8/25/2010	237	343.7	14.3	0600-0600	24	100.00%		11.0	748	CD-PT-237-082510	8/26/2010	64.2	ND	8/27/2010	9/23/2010	No	**Passed**	59705.8	2751.8
8/26/2010	238	322.3	13.5	0600-0600	22.48	93.67%	Chain on extec broke	11.0	749	CD-PT-238-082610	8/27/2010	135.3	ND	8/30/2010	9/23/2010	No	**Passed**	60028.1	2751.8
8/27/2010	239	293	13.7	0600-0600	20.42	85.08%	Changed out carbon and changed hydraulic oil in extec	11.0	760	CD-PT-239-082710	8/28/2010	73.9	ND	8/30/2010	9/23/2010	No	**Passed**	60321.1	2751.8
8/28/2010	240	325.6	13.6	0600-0600	24	100.00%		11.1	758	CD-PT-240-082810	8/30/2010	57.3	ND	8/31/2010	9/30/2010	No	**Passed**	60646.7	2751.8
8/29/2010	241	321.5	13.4	0600-0600	24	100.00%		11.6	751	CD-PT-241-082910	8/30/2010	53.4	ND	8/31/2010	9/30/2010	No	**Passed**	60968.2	2751.8
8/30/2010	242	317.5	13.2	0600-0600	24	100.00%		10.5	750	CD-PT-242-083010	8/31/2010	34.1	ND	9/1/2010	9/30/2010	No	**Passed**	61285.7	2751.8
8/31/2010	243	252.2	12.9	0600-0600	19.47	81.13%	Tune burners and calibrate weight scale	12.6	759	CD-PT-243-083110	9/1/2010	42.4	ND	9/2/2010	9/30/2010	No	**Passed**	61537.9	2751.8
9/1/2010	244	288	12.1	0600-0600	24	100.00%		12	750	CD-PT-244-090110	9/2/2010	93.9	ND	9/3/2010	9/30/2010	No	**Passed**	61825.9	2751.8
9/2/2010	245	293.4	12.2	0600-0555	23.92	99.67%		12	752	CD-PT-245-090210	9/6/2010	100.2	1.17	9/7/2010	10/5/2010	No	**Passed**	62119.3	2751.8
9/3/2010	246	170.2	11.9	1556-0600	14.07	58.63%	Maintenance to discharge and feed pugmill paddles and discharge auger	12	759	CD-PT-246-090310	9/6/2010	124.6	ND	9/7/2010	10/5/2010	No	**Passed**	62289.5	2751.8
9/4/2010	247	290.1	12.2	0600-0600	24	100.00%		12.1	763	CD-PT-247-090410	9/6/2010	159.1	0.6	9/7/2010	10/5/2010	No	**Passed**	62579.6	2751.8
9/5/2010	248	272.1	11.6	0600-0600	23.47	97.79%	Segregated 3.8 tons due to problems with baghouse differential pressure	12.6	759	CD-PT-248-090510	9/6/2010	96.4	1.1	9/7/2010	10/5/2010	No	**Passed**	62851.7	2751.8
9/6/2010	249	265.1	11	0600-0600	24	100.00%		12.1	758	CD-PT-249-090610	9/7/2010	91.5	ND	9/8/2010	10/5/2010	No	**Passed**	63116.8	2751.8
9/7/2010	250	269.1	11.2	0600-0600	23.87	99.46%	Main breaker tripped	11	757	CD-PT-250-090710	9/8/2010	61	ND	9/9/2010	10/5/2010	No	**Passed**	63385.9	2751.8
9/8/2010	251	270.9	11.3	0600-0600	24	100.00%		11.6	761	CD-PT-251-090810	9/9/2010	43.8	ND	9/10/2010	10/5/2010	No	**Passed**	63656.8	2751.8
9/9/2010	252	280.1	11.7	0600-0600	24	100.00%		11	756	CD-PT-252-090910	9/10/2010	29.1	ND	9/13/2010	10/5/2010	No	**Passed**	63936.9	2751.8
9/10/2010	253	275.3	11.5	0600-0600	22.55	93.96%	Replace bearing on bucket elevator	11.2	747	CD-PT-253-091010	9/11/2010	40.4	ND	9/13/2010	10/5/2010	No	**Passed**	64212.2	2751.8
9/11/2010	254	294.4	12.3	0600-0600	24	100.00%		11.1	753	CD-PT-254-091110	9/13/2010	58.7	ND	9/14/2010	10/18/2010	No	**Passed**	64506.6	2751.8
9/12/2010	255	296.2	12.3	0600-0600	24	100.00%		11.1	763	CD-PT-255-091210	9/13/2010	38.7	ND	9/14/2010	10/18/2010	No	**Passed**	64802.8	2751.8
9/13/2010	256	303.7	12.6	0600-0600	24	100.00%		10.7	760	CD-PT-256-091310	9/14/2010	31.84	ND	9/15/2010	10/18/2010	No	**Passed**	65106.5	2751.8
9/14/2010	257	207.8	1.9	0600-0600	16.13	67.21%	Replace feed conveyor and pugmill paddles	9.5	628	CD-PT-257-091410	9/15/2010	35.1	ND	9/16/2010	10/18/2010	No	**Passed**	65314.3	2751.8
9/15/2010	258	290.1	13.1	0600-0600	22.2	92.50%	Replace sprocket on feed belt	10.6	747	CD-PT-258-091510	9/16/2010	22.85	ND	9/17/2010	10/18/2010	No	**Passed**	65604.4	2751.8
9/16/2010	259	313.2	13	0600-0600	24	100.00%		9.6	752	CD-PT-259-091610	9/18/2010	17.87	ND	9/20/2010	10/18/2010	No	**Passed**	65917.6	2751.8
9/17/2010	260	320.7	13.3	0600-0600	24	100.00%		10.3	752	CD-PT-260-091710	9/18/2010	25.05	ND	9/20/2010	10/18/2010	No	**Passed**	66238.3	2751.8
9/18/2010	261	221.9	13.4	0600-0600	16.43	68.46%	Replace filter fabric in filter prss, other maintenance performed	10.8	729	CD-PT-261-091810	9/20/2010	17.19	ND	9/21/2010	10/26/2010	No	**Passed**	66460.2	2751.8
9/19/2010	262	307.1	13	0600-0600	23.68	98.67%	Burner braker tripped	10.6	763	CD-PT-262-091910	9/20/2010	25.05	ND	9/21/2010	10/26/2010	No	**Passed**	66767.3	2751.8
9/20/2010	263	313.2	13	0600-0600	24	100.00%		10.6	760	CD-PT-263-092010	9/21/2010	17.78	ND	9/22/2010	10/26/2010	No	**Passed**	67080.5	2751.8
9/21/2010	264	283.9	12.2	0600-0515	23.25	96.88%	Shutdown for pugmill maintenance.	10.5	758	CD-PT-264-092110	9/22/2010	14.18	ND	9/23/2010	10/26/2010	No	**Passed**	67364.4	2751.8
9/22/2010	265	173.7	12.6	1612-0600	13.37	55.71%		10.6	763	CD-PT-265-092210	9/23/2010	19.49	ND	9/24/2010	10/26/2010	No	**Passed**	67538.1	2751.8
9/23/2010	266	325.8	13.6	0600-0600	24	100.00%		10.1	755	CD-PT-266-092310	9/24/2010	42	ND	9/27/2010	10/26/2010	No	**Passed**	67863.9	2751.8
9/24/2010	267	321.9	13.4	0600-0600	24	100.00%		10.6	752	CD-PT-267-092410	9/25/2010	18.66	ND	9/27/2010	10/26/2010	No	**Passed**	68185.8	2751.8
9/25/2010	268	315.8	13.2	0600-0600	24	100.00%		11.1	749	CD-PT-268-092510	9/27/2010	82.3	ND	9/28/2010	11/19/2010	No	**Passed**	68501.6	2751.8
9/26/2010	269	317.4	13.2	0600-0600	24	100.00%		10.6	761	CD-PT-269-092610	9/27/2010	85.8	ND	9/28/2010	11/19/2010	No	**Passed**	68819	2751.8
9/27/2010	270	282.2	12.8	0600-0310	21.17	88.21%	Shut down from 0310 on 9/27 to 0819 on 9/29 to change out ID fan	14.1	758	CD-PT-270-092710	9/28/2010	305.4	1.53	9/29/2010	11/19/2010	Yes	**Passed**	69101.2	2751.8
9/29/2010	271	287.9	13.2	0819-0600	21.68	45.17%		11.1	751	CD-PT-271-092910	9/30/2010	105.8	ND	10/1/2010	11/19/2010	No	**Passed**	69389.1	2751.8
9/30/2010	272	322.3	13.4	0600-0600	24	100.00%		11.1	748	CD-PT-272-093010	10/1/2010	130.2	1.94	10/4/2010	11/19/2010	No	**Passed**	69711.4	2751.8
10/1/2010	273	327.7	13.6	0600-0600	24	100.00%		11.8	748	CD-PT-273-100110	10/2/2010	191.7	2.2	10/4/2010	11/19/2010	No	**Passed**	70039.1	2751.8
10/2/2010	274	329.1	13.7	0600-0600	24	100.00%		10.8	745	CD-PT-274-100210	10/4/2010	95.6	0.99	10/5/2010	11/19/2010	No	**Passed**	70368.2	2751.8
10/3/2010	275	334	14.1	0600-0600	24	100.00%		10.8	752	CD-PT-275-100310	10/4/2010	121.2	1.23	10/5/2010	11/19/2010	Yes	**Passed**	70702.2	2751.8
10/4/2010	276	296.2	14.1	0600-0300	20.83	86.79%	Shutdown to install new baghouse	10.2	758	CD-PT-276-100410	10/5/2010	125.3	ND	10/6/2010	11/19/2010	No	**Passed**	70998.4	2751.8
Shutdown from 0300 on 10/5 until 1930 on 10/7 to install new baghouse																			
10/7/2010	277	177.6	10.6	1930-1210	16.67	69.46%	Shutdown to inspect the inside of the	12.3	751	CD-PT-277-100710	10/11/2010	646	1.16	10/12/2010	11/23/2010	No	**Passed**	71176	2751.8

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
10/8/2010	278	66	12.5	2355-0600	6.08	25.33%	new baghouse	11.8	752	CD-PT-278-100810	10/11/2010	741	3.6	10/12/2010	11/23/2010	No	**Passed**	71242	2751.8
10/9/2010	279	324.1	14.3	0600-0600	24	100.00%		10.5	756	CD-PT-279-100910	10/11/2010	837	7.6	10/12/2010	11/23/2010	Yes	**Passed**	71566.1	2751.8
10/10/2010	280	338.8	13.7	0600-0600	23.78	99.08%	Repaired discharge conveyor	11.8	756	CD-PT-280-101010	10/11/2010	221.5	5.4	10/12/2010	11/23/2010	Yes	**Passed**	71904.9	2751.8
10/11/2010	281	330.8	13.4	0600-0600	23.67	98.63%	Hose broke on feed excavator	12.2	754	CD-PT-281-101110	10/12/2010	728	4.7	10/13/2010	11/23/2010	Yes	**Passed**	72235.7	2751.8
10/12/2010	282	323	13.4	0600-0600	24	100.00%		12.2	763	CD-PT-282-101210	10/13/2010	1254	10.6	10/14/2010	11/23/2010	Yes	Failed	72235.7	3074.8
10/13/2010	283	323.5	13.4	0600-0600	24	100.00%		12.4	763	CD-PT-283-101310	10/14/2010	631	5.5	10/15/2010	11/23/2010	Yes	**Passed**	72559.2	3074.8
10/14/2010	284	303.5	12.6	0600-0544	23.77	99.04%	Gas lines froze	12.5	765	CD-PT-284-101410	10/15/2010	1027	11.0	10/18/2010	11/23/2010	Yes	Failed	72559.2	3378.3
10/15/2010	285	296.3	12.3	0610-0600	23.83	99.29%		12.7	764	CD-PT-285-101510	10/16/2010	1537	12.3	10/18/2010	11/23/2010	Yes	Failed	72559.2	3674.6
10/16/2010	286	300.3	12.5	0600-0600	24	100.00%		12.3	768	CD-PT-286-101610	10/18/2010	847	5.1	10/19/2010	11/23/2010	Yes	**Passed**	72859.5	3674.6
10/17/2010	287	301.8	12.5	0600-0600	24	100.00%		12.1	772	CD-PT-287-101710	10/18/2010	1340	6.6	10/19/2010	11/23/2010	Yes	**Passed**	73161.3	3674.6
10/18/2010	288	100.9	10.6	0600-0600	9.2	38.33%	Maintenance to feed pugmill, quench, and inspect the new baghouse	12.3	772	CD-PT-288-101810	10/19/2010	607	6.4	10/20/2010	11/23/2010	No	**Passed**	73262.2	3674.6
10/19/2010	289	266.2	11.1	0600-0600	24	100.00%		12.4	777	CD-PT-289-101910	10/20/2010	310	3.8	10/21/2010	11/23/2010	Yes	**Passed**	73528.4	3674.6
10/20/2010	290	264.8	11	0600-0600	24	100.00%		14.4	774	CD-PT-290-102010	10/21/2010	1120	2.04	10/22/2010	11/23/2010	Yes	**Passed**	73793.2	3674.6
10/21/2010	291	248.0	10.9	0600-0600	22.55	93.96%	Repair front seal grease fitting	11.1	777	CD-PT-291-102110	10/22/2010	494	1.77	10/25/2010	11/23/2010	No	**Passed**	74041.2	3674.6
10/22/2010	292	256.3	11	0600-0515	23.25	96.88%	Scheduled maintenance	10	775	CD-PT-292-102210	10/23/2010	337	2.3	10/25/2010	11/23/2010	No	**Passed**	74297.5	3674.6
10/23/2010	293	127.8	11.5	1856-0600	11.07	46.13%		11.5	755	CD-PT-293-102310	10/25/2010	1092	ND	10/26/2010	11/30/2010	No	**Passed**	74425.3	3674.6
10/24/2010	294	281.2	11.7	0600-0600	24	100.00%		11.3	765	CD-PT-294-102410	10/25/2010	954	ND	10/26/2010	11/30/2010	No	**Passed**	74706.5	3674.6
10/25/2010	295	285.8	11.9	0600-0600	24	100.00%		10.7	757	CD-PT-295-102510	10/26/2010	1317	0.77	10/27/2010	11/30/2010	Yes	**Passed**	74992.3	3674.6
10/26/2010	296	279.2	11.6	0600-0600	24	100.00%		13.6	751	CD-PT-296-102610	10/27/2010	583	3.3	10/28/2010	11/30/2010	No	**Passed**	75271.5	3674.6
10/27/2010	297	299.5	12.5	0600-0600	24	100.00%		13.4	746	CD-PT-297-102710	10/28/2010	647	4.4	10/29/2010	11/30/2010	Yes	**Passed**	75571	3674.6
10/28/2010	298	293.4	12.2	0600-0600	24	100.00%		13.8	745	CD-PT-298-102810	10/29/2010	367	16.3	11/1/2010	11/30/2010	Yes	Failed	75571	3968
10/29/2010	299	297.6	12.4	0600-0600	24	100.00%		12.9	763	CD-PT-299-102910	10/30/2010	841	13.3	11/1/2010	11/30/2010	Yes	Failed	75571	4265.6
10/30/2010	300	306	12.7	0600-0600	24	100.00%		13.6	752	CD-PT-300-103010	11/1/2010	961	39	11/2/2010	12/11/2010	Yes	Failed	75571	4571.6
10/31/2010 & 11/1/2010	301	250.4	11.4	0600-0600	22.3	46.46%	General plant maintenance including carbon changeout and work on quench	13.5	765	CD-PT-301-103110	11/2/2010	803	2.15	11/3/2010	12/11/2010	Yes	**Passed**	75821.4	4571.6
11/2/2010	302	253.4	10.5	0600-0600	24	100.00%		14.6	775	CD-PT-302-110210	11/3/2010	631	3.2	11/4/2010	12/11/2010	Yes	**Passed**	76074.8	4571.6
11/3/2010	303	247.5	10.3	0600-0600	24	100.00%		12.6	774	CD-PT-303-110310	11/4/2010	1199	2.5	11/5/2010	12/11/2010	Yes	**Passed**	76322.3	4571.6
11/4/2010	304	247.6	10.3	0600-0600	24	100.00%		12.7	774	CD-PT-304-110410	11/5/2010	345	4	11/8/2010	12/11/2010	Yes	**Passed**	76569.9	4571.6
11/5/2010	305	249.9	10.4	0600-0600	23.9	99.58%	Lost Burners	13.3	774	CD-PT-305-110510	11/6/2010	601	3.3	11/8/2010	12/11/2010	Yes	**Passed**	76819.8	4571.6
11/6/2010	306	263.2	10.5	0600-0600	24	100.00%		12.8	764	CD-PT-306-110610	11/8/2010	314	0.66	11/9/2010	12/14/2010	No	**Passed**	77083	4571.6
11/7/2010	307	245.2	10.2	0600-0600	24	100.00%		12.9	770	CD-PT-307-110710	11/8/2010	584	0.68	11/9/2010	12/14/2010	Yes	**Passed**	77328.2	4571.6
11/8/2010	308	243	10.1	0600-0600	24	100.00%		12.7	771	CD-PT-308-110810	11/9/2010	499	3.9	11/10/2010	12/14/2010	Yes	**Passed**	77571.2	4571.6
11/9/2010	309	166.6	10	0600-0600	16.72	69.67%	Repair Quench and bucket elevator	13.2	770	CD-PT-309-110910	11/10/2010	673	2.72	11/11/2010	12/14/2010	No	**Passed**	77737.8	4571.6
11/10/2010	310	254.1	10.6	0600-0600	24	100.00%		12.7	768	CD-PT-310-111010	11/11/2010	1235	3.1	11/12/2010	12/14/2010	Yes	**Passed**	77991.9	4571.6
11/11/2010	311	252.4	10.5	0600-0600	24	100.00%		13.4	774	CD-PT-311-111110	11/12/2010	409	6.3	11/15/2010	12/14/2010	Yes	**Passed**	78244.3	4571.6
11/12/2010	312	253.4	10.5	0600-0600	24	100.00%		13.2	776	CD-PT-312-111210	11/13/2010	444	3.2	11/15/2010	12/14/2010	Yes	**Passed**	78497.7	4571.6
11/13/2010	313	252.5	10.5	0600-0600	24	100.00%		13.2	774	CD-PT-313-111310	11/15/2010	392	2.46	11/16/2010	1/10/2011	Yes	**Passed**	78750.2	4571.6
11/14/2010	314	252.1	10.5	0600-0600	24	100.00%		12.8	771	CD-PT-314-111410	11/15/2010	354	6.1	11/16/2010	1/10/2011	Yes	**Passed**	79002.3	4571.6
11/15/2010	315	250.5	10.4	0600-0600	24	100.00%		14	767	CD-PT-315-111510	11/16/2010	343	6.3	11/17/2010	1/10/2011	No	**Passed**	79252.8	4571.6
11/16/2010	316	158.2	10.3	0600-0600	15.4	64.17%	General maintenance including changing pugmill paddles. Lost power for 40 min.	13.4	766	CD-PT-316-111610	11/17/2010	693	5.2	11/18/2010	1/10/2011	No	**Passed**	79411	4571.6
11/17/2010	317	250.9	10.5	0600-0600	24	100.00%		13.4	769	CD-PT-317-111710	11/18/2010	964	3.8	11/19/2010	1/10/2011	No	**Passed**	79661.9	4571.6
11/18/2010	318	250.3	10.4	0600-0600	24	100.00%		14.9	769	CD-PT-318-111810	11/20/2010	320	2.36	11/22/2010	1/10/2011	Yes	**Passed**	79912.2	4571.6
11/19/2010	319	252.3	10.5	0600-0600	24	100.00%		13.6	771	CD-PT-319-111910	11/20/2010	623	3.5	11/22/2010	1/10/2011	No	**Passed**	80164.5	4571.6
11/20/2010	320	253	10.5	0600-0600	24	100.00%		14	767	CD-PT-320-112010	11/22/2010	365	1.77	11/23/2010	1/10/2011	No	**Passed**	80417.5	4571.6
11/21/2010	321	252.1	10.5	0600-0600	24	100.00%		14	766	CD-PT-321-112110	11/22/2010	528	2.56	11/23/2010	1/10/2011	No	**Passed**	80669.6	4571.6
11/22/2010	322	253.7	10.5	0600-0600	24	100.00%		14.9	771	CD-PT-322-112210	11/24/2010	614	2.86	11/24/2010	1/10/2011	No	**Passed**	80923.3	4571.6
11/23/2010	323	254.3	10.5	0600-0600	24	100.00%		13.1	766	CD-PT-323-112310	11/24/2010	110.5	2.03	11/24/2010	1/10/2011	No	**Passed**	81177.6	4571.6
11/24/2010	324	67.4	10.5	0600-1226	6.43	26.79%	Shutdown for Thanksgiving Holiday	14.2	770	CD-PT-324-112410	11/29/2010	523	2.4	11/30/2010	2/5/2011	No	**Passed**	81245	4571.6

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
Shutdown for Thanksgiving Holiday																			
11/30/2010	325	104.7	10.6	1911-0600	9.9	41.25%	Repair double dump valve	12.7	769	CD-PT-325-113010	12/1/2010	379	2.61	12/2/2010	2/5/2011	No	**Passed**	81349.7	4571.6
12/1/2010	326	211.9	10.6	0600-0600	19.88	82.83%	Maintenance to silo	11.9	773	CD-PT-326-120110	12/2/2010	547	0.79	12/3/2010	2/5/2011	No	**Passed**	81561.6	4571.6
12/2/2010	327	243.7	10.2	0600-0600	24	100.00%		13.6	770	CD-PT-327-120210	12/3/2010	179	ND	12/6/2010	2/5/2011	No	**Passed**	81805.3	4571.6
12/3/2010	328	92.3	10.2	0600-0600	9.22	38.42%	Replacing baghouse filters and pumps. Power to burners tripped 4 times	13.6	763	CD-PT-328-120310	12/4/2010	441	1.26	12/6/2010	2/5/2011	No	**Passed**	81897.6	4571.6
12/4/2010 & 12/5/2010	329	90.9	10.4	0600-0600	9.18	19.13%	Replacing baghouse filters, repair bucket elevator and quench	13.6	779	CD-PT-329-120410	12/6/2010	339	3.8	12/7/2010	2/15/2011	No	**Passed**	81988.5	4571.6
12/6/2010	330	246.5	10.3	0600-0600	24	100.00%		11.1	768	CD-PT-330-120610	12/7/2010	498	1.67	12/8/2010	2/15/2011	No	**Passed**	82235	4571.6
12/7/2010	331	185.7	9.6	0600-0600	18.85	78.54%	Shutdown to inspect TPH in feed soil. Power trip - 22 minute shutdown	12.3	798	CD-PT-331-120710	12/8/2010	260	2.61	12/9/2010	2/15/2011	No	**Passed**	82420.7	4571.6
12/8/2010 &12/9/2010	332	78.4	9.8	0600-1422	8.37	17.64%	Replacing bag filters in baghouse	12	760	CD-PT-332-120810	12/9/2010	587	ND	12/10/2010	2/15/2011	No	**Passed**	82499.1	4571.6
12/10/2010	333	228.9	10.3	0527-0600	22.67	92.34%	Lack of draft throughout system	11.1	768	CD-PT-333-121010	12/11/2010	520	1.52	12/13/2010	2/15/2011	No	**Passed**	82728	4571.6
12/11/2010	334	238.5	9.9	0600-0600	24	100.00%		11.5	759	CD-PT-334-121110	12/13/2010	498	1.66	12/14/2010	2/24/2011	Yes	**Passed**	82966.5	4571.6
12/12/2010	335	225.4	9.4	0600-0600	23.75	98.96%	Shutdown due to soil inconsistency	11.6	766	CD-PT-335-121210	12/13/2010	402	2.1	12/14/2010	2/24/2011	Yes	**Passed**	83191.9	4571.6
12/13/2010	336	218.7	9	0600-0600	24	100.00%		12.4	765	CD-PT-336-121310	12/14/2010	321	3.2	12/15/2010	2/24/2011	No	**Passed**	83410.6	4571.6
12/14/2010 - 12/16/2010	337	222.7	9.5	0600-0600	24.15	33.54%	Replace gaskets and filter seals on baghouse, repair propane vaporizer	12.4	765	CD-PT-337-121410	12/20/2010	222	ND	12/21/2010	2/24/2011	Yes	**Passed**	83633.3	4571.6
12/17/2010	338	250.6	10.4	0600-0600	24	100.00%		12.8	756	CD-PT-338-121710	12/18/2010	273	1.44	12/20/2010	2/24/2011	No	**Passed**	83883.9	4571.6
12/18/2010	339	215.9	10.4	0600-0600	20.92	87.17%	Lost power to burners and vaporizer. Also worked on propane vaporizer	13.6	755	CD-PT-339-121810	12/20/2010	204	ND	12/21/2010	2/24/2011	No	**Passed**	84099.8	4571.6
12/19/2010	340	253.9	10.5	0600-0600	24	100.00%		14	754	CD-PT-340-121910	12/20/2010	264	1.43	12/21/2010	2/24/2011	Yes	**Passed**	84353.7	4571.6
12/20/2010	341	253.0	10.5	0600-0600	24	100.00%		12.8	762	CD-PT-341-122010	12/21/2010	171.8	0.79	12/22/2010	2/24/2011	No	**Passed**	84606.7	4571.6
12/21/2010	342	237.7	10.5	0600-0440	22.67	94.46%	Maintenance on the pugmill paddles	12.4	756	CD-PT-342-122110	12/22/2010	210.3	0.54	12/23/2010	2/24/2011	No	**Passed**	84844.4	4571.6
12/22/2010	343	116.5	11	1919-0600	10.68	44.50%		12.7	769	CD-PT-343-122210	12/23/2010	224.4	ND	12/23/2010	2/24/2011	No	**Passed**	84960.9	4571.6
12/23/2010	344	280.8	11.6	0600-0600	24	100.00%		12.3	754	CD-PT-344-122310	12/28/2010	122.3	4	12/29/2010	2/24/2011	No	**Passed**	85241.7	4571.6
12/24/2010	345	119.9	12	0600-1558	9.97	41.54%	Shutdown for Holiday	11.6	775	CD-PT-345-122410	12/28/2010	231.1	4.6	12/29/2010	2/24/2011	No	**Passed**	85361.6	4571.6
Shutdown for Christmas Holiday																			
12/26/2010	346	214.2	11.3	0716-0200	18.73	78.04%		13.6	756	CD-PT-346-122610	12/28/2010	264.6	3.6	12/29/2010	2/24/2011	No	**Passed**	85575.8	4571.6
12/27/2010	347	151.3	12.6	1500-0600	14	58.33%	Frozen H2O lines in quench	12.4	766	CD-PT-347-122710	12/28/2010	263.9	1.65	12/29/2010	2/24/2011	No	**Passed**	85727.1	4571.6
12/28/2010	348	129.2	12.6	0600-1650	10.83	45.13%	Repairs in baghouse	12.4	750	CD-PT-348-122810	12/29/2010	199.2	3.2	12/30/2010	2/24/2011	No	**Passed**	85856.3	4571.6
12/29/2010-12/31/2010	349	202.5	11	0942-0406	18.4	25.56%	Repair crack in calciner	11	742	CD-PT-349-122910	12/30/2010	290	1.82	12/30/2010	2/24/2011	No	**Passed**	86058.8	4571.6
1/1/2011	350	211.2	10.7	1019-0600	19.68	82.00%		13.2	750	CD-PT-350-010111	1/3/2011	402	1.31	1/4/2011	3/2/2011	Yes	**Passed**	86270	4571.6
1/2/2011	351	250.8	10.9	0600-0600	23.67	98.63%	Nitrogen ran out	12.5	762	CD-PT-351-010211	1/3/2011	277.6	1.76	1/4/2011	3/2/2011	Yes	**Passed**	86520.8	4571.6
1/3/2011	352	177.1	9.3	0600-0600	16.3	67.92%	Breaker tripped, replaced ID fan motor, replaced pugmill bearing	13	752	CD-PT-352-010311	1/4/2011	236	2.9	1/5/2011	3/2/2011	Yes	**Passed**	86697.9	4571.6
1/4/2011	353	265.9	11.1	0600-0600	24	100.00%		11.3	761	CD-PT-353-010411	1/5/2011	109.2	2.8	1/6/2011	3/2/2011	Yes	**Passed**	86963.8	4571.6
1/5/2011	354	159.0	10.6	0600-0600	16.03	66.79%	Replace filter rows 9 and 10 in baghouse	13.7	656	CD-PT-354-010511	1/6/2011	417.3	1.78	1/7/2011	3/2/2011	Yes	**Passed**	87122.8	4571.6
1/6/2011	355	286.6	12.3	0600-0600	23.57	98.21%	Lost Burners	12.4	775	CD-PT-355-010611	1/8/2011	256.6	4.7	1/10/2011	3/2/2011	Yes	**Passed**	87409.4	4571.6
1/7/2011	356	303.0	12.6	0600-0600	24	100.00%		13.1	783	CD-PT-356-010711	1/8/2011	429	5	1/10/2011	3/2/2011	Yes	**Passed**	87712.4	4571.6
1/8/2011	357	195.3	12.5	0600-0220	15.45	64.38%	Investigate possible crack in calciner, auger maintenance	13.5	775	CD-PT-357-010811	1/10/2011	343.7	3.5	1/11/2011	3/2/2011	Yes	**Passed**	87907.7	4571.6
1/9/2011	358	267.3	12.3	0645-0455	22.17	92.38%	Baghouse maintenance and replacing filters, replaced pugmill paddles	13	778	CD-PT-358-010911	1/10/2011	325.3	3.4	1/11/2011	3/2/2011	Yes	**Passed**	88175	4571.6
1/10/2011 & 1/11/2011	359	276.7	12.5	0600-0600	21.93	45.69%		12.8	783	CD-PT-359-011111	1/12/2011	248.2	1.35	1/13/2011	3/2/2011	Yes	**Passed**	88451.7	4571.6
1/12/2011	360	296.9	12.5	0600-0600	24	100.00%		14	788	CD-PT-360-011211	1/13/2011	427	3	1/14/2011	3/2/2011	Yes	**Passed**	88748.6	4571.6
1/13/2011	361	272.7	12.2	0600-0600	22.4	93.33%	Back hoe in feed building broke down	14.5	781	CD-PT-361-011311	1/15/2011	554	1.73	1/17/2011	3/2/2011	Yes	**Passed**	89021.3	4571.6
1/14/2011	362	298.2	12.5	0600-0600	24	100.00%		15.3	776	CD-PT-362-011411	1/15/2011	270	1.39	1/17/2011	3/2/2011	No	**Passed**	89319.5	4571.6

Pile Generation Date	Pile Number	Daily Tons Processed	Soil Feed Rate (tons/hour)	Contaminated Soil Feed (Start/Stop Time)	Contaminated Soil Feed Operation Hours	Percent On-Line (treatment time per 24 hrs)	Reasons For Shutdown/Comments	Percent Soil Moisture	Exit Temperature (Deg. F)	SES Post LTTD Sample ID	Sample Date	PCB Pre-Treat Analytical (mg/kg)	PCB Post-Treat Analytical (mg/kg)	Prelim Anaytical	Validated Analytical	Capacitors noted by MT in pile?	Meets ROD Criteria?	Tons Passed to Date	Tons Failed to Date
1/15/2011	363	297.4	12.4	0600-0600	24	100.00%		14	773	CD-PT-363-011511	1/17/2011	297	2.5	1/18/2011	3/4/2011	Yes	**Passed**	89616.9	4571.6
1/16/2011	364	306.9	12.8	0600-0600	24	100.00%		13.5	782	CD-PT-364-011611	1/17/2011	220	3.1	1/18/2011	3/4/2011	Yes	**Passed**	89923.8	4571.6
1/17/2011	365	296.4	12.4	0600-0600	24	100.00%		13.35	778	CD-PT-365-011711	1/18/2011	2154	5	1/19/2011	3/4/2011	Yes	**Passed**	90220.2	4571.6
1/18/2011 &1/19/2011	366	260.3	11.5	0600-0446	22.77	47.44%	General plant maintenance including changing pugmill paddles, jacking belt, conveyor	15.7	778	CD-PT-366-011811	1/19/2011	699	6.5	1/20/2011	3/4/2011	No	**Passed**	90480.5	4571.6
1/20/2011	367	219.9	11.2	1025-0600	19.58	81.58%		13.8	780	CD-PT-367-012011	1/21/2011	1560	7.8	1/24/2011	3/4/2011	No	**Passed**	90700.4	4571.6
1/21/2011	368	159.9	10.9	0600-0600	14.9	62.08%	Discharge auger replaced, vaporizer tripped	14.95	794	CD-PT-368-012111	1/22/2011	1262	10.4	1/24/2011	3/4/2011	Yes	Failed	90700.4	4731.5
1/22/2011	369	230.2	10.8	0600-0600	21.88	91.17%	Unthaw lines, replace HEPA #2, lost face pressure	15.8	792	CD-PT-369-012211	1/24/2011	2190	3.3	1/25/2011	3/21/2011	Yes	**Passed**	90930.6	4731.5
1/23/2011	370	243.3	11.4	0600-0600	22.33	93.04%	Lost face pressure	15.1	786	CD-PT-370-012311	1/24/2011	603.5	6	1/25/2011	3/21/2011	Yes	**Passed**	91173.9	4731.5
1/24/2011	371	258.0	10.9	0600-0600	24	100.00%		14.25	781	CD-PT-371-012411	1/25/2011	768	4.1	1/26/2011	3/21/2011	Yes	**Passed**	91431.9	4731.5
1/25/2011	372	254.2	10.6	0600-0600	24	100.00%		15.95	778	CD-PT-372-012511	1/26/2011	487.6	4.8	1/28/2011	3/21/2011	Yes	**Passed**	91686.1	4731.5
1/26/2011	373	251.9	10.9	0600-0600	24	100.00%		15.4	787	CD-PT-373-012611	1/27/2011	597.2	3.4	1/28/2011	3/21/2011	Yes	**Passed**	91938	4731.5
1/27/2011	374	259.9	10.9	0600-0600	24	100.00%		14.8	795	CD-PT-374-012711	1/28/2011	999	6.3	1/31/2011	3/21/2011	Yes	**Passed**	92197.9	4731.5
1/28/2011	375	248.3	10.4	0600-0600	24	100.00%		15.8	786	CD-PT-375-012811	1/29/2011	241	7	1/31/2011	3/21/2011	Yes	**Passed**	92446.2	4731.5
1/29/2011	376	246.2	10.4	0600-0600	24	100.00%		15.4	789	CD-PT-376-012911	1/31/2011	795	4.9	2/2/2011	3/21/2011	Yes	**Passed**	92692.4	4731.5
1/30/2011	377	217.7	10.2	0600-0332	21.53	89.71%	Shutdown for maintenance to baghouse	14.7	790	CD-PT-377-013011	1/31/2011	813	2.6	2/2/2011	3/21/2011	Yes	**Passed**	92910.1	4731.5
1/31/2011 &2/1/2011	378	203.7	10.4	1011-0600	19.82	41.29%		14	787	CD-PT-378-020111	2/2/2011	356.5	2.09	2/3/2011	3/21/2011	Yes	**Passed**	93113.8	4731.5
2/2/2011	379	228.8	10.3	0600-0600	22.57	94.04%	Power outage	15.6	783	CD-PT-379-020211	2/3/2011	586	4.1	2/4/2011	3/21/2011	No	**Passed**	93342.6	4731.5
2/3/2011	380	248.9	10.4	0600-0600	24	100.00%		14.4	791	CD-PT-380-020311	2/4/2011	251.7	3.1	2/7/2011	3/21/2011	No	**Passed**	93591.5	4731.5
2/4/2011	381	249.3	10.4	0600-0600	24	100.00%		15.6	786	CD-PT-381-020411	2/5/2011	244.5	2.3	2/7/2011	3/21/2011	Yes	**Passed**	93840.8	4731.5
2/5/2011	382	227.2	10.5	0600-0600	22.08	92.00%	Lead Carbon break through, changed out carbon	17.1	788	CD-PT-382-020511	2/7/2011	143.4	1.15	2/8/2011	3/30/2011	Yes	**Passed**	94068	4731.5
2/6/2011	383	247.4	10.3	0600-0600	24	100.00%		16.2	785	CD-PT-383-020611	2/7/2011	119	ND	2/8/2011	3/30/2011	Yes	**Passed**	94315.4	4731.5
2/7/2011	384	254.4	10.5	0600-0600	24	100.00%		16.2	791	CD-PT-384-020711	2/8/2011	141.2	2.09	2/9/2011	3/30/2011	No	**Passed**	94569.8	4731.5
2/8/2011	385	255.2	10.6	0600-0600	24	100.00%		15.6	787	CD-PT-385-020811	2/9/2011	420.9	1.58	2/10/2011	3/30/2011	Yes	**Passed**	94825	4731.5
2/9/2011	386	255.5	10.7	0600-0600	24	100.00%		14	783	CD-PT-386-020911	2/10/2011	307.7	1.1	2/11/2011	3/30/2011	Yes	**Passed**	95080.5	4731.5
2/10/2011	387	255.8	10.6	0600-0600	24	100.00%		14.6	799	CD-PT-387-021011	2/12/2011	194.6	1.9	2/14/2011	3/30/2011	No	**Passed**	95336.3	4731.5
2/11/2011	388	253.4	10.6	0600-0600	24	100.00%		16	789	CD-PT-388-021111	2/12/2011	241	2.28	2/14/2011	3/30/2011	Yes	**Passed**	95589.7	4731.5
2/12/2011	389	251.5	10.6	0600-0600	23.8	99.17%	Power outage	13.3	794	CD-PT-389-021211	2/14/2011	154.2	1.38	2/15/2011	3/31/2011	Yes	**Passed**	95841.2	4731.5
2/13/2011	390	221.7	10.7	0600-0320	19.73	82.21%	Segrating soil low exit temperature, scheduled maintenance shutdown	11.1	786	CD-PT-390-021311	2/14/2011	364	ND	2/15/2011	3/31/2011	Yes	**Passed**	96062.9	4731.5
2/14/2011 & 2/15/2011	391	287.3	10.6	0300-0600	27	56.25%		13	787	CD-PT-391-021511	2/16/2011	326	ND	2/17/2011	3/31/2011	Yes	**Passed**	96350.2	4731.5
2/16/2011	392	223.8	11.3	0600-0220	20.33	84.71%	Auger snapped	11.4	740	CD-PT-392-021611	2/17/2011	319	ND	2/18/2011	3/31/2011	Yes	**Passed**	96574	4731.5
2/17/2011	393	203.0	11.6	1248-0600	17.2	71.67%		13.9	783	CD-PT-393-021711	2/19/2011	374	1.64	2/21/2011	3/31/2011	No	**Passed**	96777	4731.5
2/18/2011	394	290.7	12.1	0600-0600	24	100.00%		13.2	784	CD-PT-394-021811	2/19/2011	399	1.79	2/21/2011	3/31/2011	No	**Passed**	97067.7	4731.5
2/19/2011	395	290.4	12.1	0600-0600	24	100.00%		11.4	786	CD-PT-395-021911	2/21/2011	344	1.01	2/22/2011	3/30/2011	No	**Passed**	97358.1	4731.5
2/20/2011	396	290.5	12.2	0600-0600	24	100.00%		10.5	784	CD-PT-396-022011	2/21/2011	525	ND	2/22/2011	3/30/2011	No	**Passed**	97648.6	4731.5
2/21/2011	397	298.6	12.5	0600-0600	24	100.00%		12.7	786	CD-PT-397-022111	2/22/2011	710	ND	2/23/2011	3/30/2011	No	**Passed**	97947.2	4731.5
2/22/2011	398	54.3	12.8	0600-1015	4.25	17.71%	Ran out of contaminated feed soil @ 1015, ran clean until 1145	12.3	788	CD-PT-398-022211	2/22/2011	489	1.14	2/23/2011	3/30/2011	No	**Passed**	98001.5	4731.5
Project Complete																			

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
MB0001	ba4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0003	ba2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0004	ba3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0005	ba3	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0006	ba4	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0007	bb1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0008	bb2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0009	bb3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0010	bb4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
MB0011	ba1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA - ChemTech	4/7/2009		5/13/2009	
B0001	ba4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0003	ba2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0004	ba3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0005	ba3	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0006	ba04	Adjacent to Railroad, 18-24"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0007	bb1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0008	bb2	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0009	bb3	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0010	bb4	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
B0011	ba1	Adjacent to Railroad, 0-6"BG	4/7/2009	SO	DESA- Datachem	4/7/2009		5/13/2009	
MB0012	ba8	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0013	ba5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0014	ba6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0015	ba7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0016	ba7	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0017	ba8-QC	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0018	bb5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0019	bb6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0020	bb7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0021	bb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
MB0022	Dupbb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA - ChemTech	4/8/2009		5/13/2009	
B0012	ba8	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0013	ba5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0014	ba6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0015	ba7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0016	ba7	Adjacent to Railroad, 18-24"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0017	ba8-QC	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0018	bb5	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0019	bb6	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0020	bb7	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0021	bb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
B0022	Dupbb8	Adjacent to Railroad, 0-6"BG	4/8/2009	SO	DESA- Datachem	4/8/2009		5/13/2009	
MB0023	ba9	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0024	ba10	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0025	ba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0026	ba11	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0027	ba11	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0028	ba12	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
MB0029	Dupba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA - ChemTech	4/9/2009		5/13/2009	
B0023	ba9	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0024	ba10	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0025	ba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0026	ba11	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0027	ba11	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	
B0028	ba12	Adjacent to Railroad, 0-6"BG	4/9/2009	SO	DESA- Datachem	4/9/2009		5/13/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
B0029	Dupba10	Adjacent to Railroad, 18-24"BG	4/9/2009	SO	DESA-Datachem	4/9/2009		5/13/2009	
B0033	C19	Grid C19 Wood Floor	5/20/2009	Other	DESA-Datachem	5/20/2009		6/17/2009	
B0034	C/D18	Grid C/D18 Soils @ 6 ft BG	5/20/2009	SO	DESA-Datachem	5/20/2009		6/17/2009	
B0035	E14	Grid E14 Soils @ 6 ft BG	5/20/2009	SO	DESA-Datachem	5/20/2009		6/17/2009	
MB0036	C19	Grid C19 Wood Floor	5/20/2009	Other	DESA - ChemTech	5/20/2009		6/17/2009	
MB0037	C/D18	Grid C/D18 Soils @ 6 ft BG	5/20/2009	SO	DESA - ChemTech	5/20/2009		6/17/2009	
MB0038	E14	Grid E14 Soils @ 6 ft BG	5/20/2009	SO	DESA - ChemTech	5/20/2009		6/17/2009	
B0042	B11	Grid B11 Test Pit 7 ft BG	5/21/2009	SO	DESA-Datachem	5/21/2009		6/17/2009	
B0043	C15	Grid C15 Test Pit 7.5 ft BG	5/21/2009	SO	DESA-Datachem	5/21/2009		6/17/2009	
MB0044	C15	Grid C15 Test Pit 7.5 ft BG	5/21/2009	SO	DESA - ChemTech	5/21/2009		6/17/2009	
MB0045	B11	Grid B11 Test Pit 7 ft BG	5/21/2009	SO	DESA - ChemTech	5/21/2009		6/17/2009	
B0046	B14	Grid B14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
B0048	C15	Grid C15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
B0049	D15	Grid D15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
B0050	C14	Grid C14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA-Datachem	6/8/2009	6/30/2009	8/19/2009	
MB0046	B14	Grid B14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
MB0047	C14	Grid C14 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
MB0048	C15	Grid C15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
MB0049	D15	Grid D15 Confirmation Wall @ 1.5 ft BG	6/8/2009	SO	DESA - ChemTech	6/8/2009		8/19/2009	
B0051	A14	Grid A14 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA-Datachem	6/9/2009	6/30/2009	8/19/2009	
B0052	A15	Grid A15 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA-Datachem	6/9/2009	6/30/2009	8/19/2009	
MB0051	A14	Grid A14 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA - ChemTech	6/9/2009		8/19/2009	
MB0052	A15	Grid A15 Confirmation Wall @ 1.5 ft BG	6/9/2009	SO	DESA - ChemTech	6/9/2009		8/19/2009	
B0054	B16	Grid B16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0055	B17	Grid B17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0056	C16	Grid C16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0057	C17	Grid C17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0058	C18	Grid C18 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0059	D16	Grid D16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0060	B16	Grid B16 DUP Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
B0062	B14	Grid B14 Confirmation Floor @ 2 ft BG	6/10/2009	SO	DESA-Datachem	6/10/2009	6/30/2009	8/19/2009	
MB0053	B14	Grid B14 Confirmation Floor @ 2 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0054	B16	Grid B16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0055	B17	Grid B17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0056	C16	Grid C16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0057	C17	Grid C17 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0058	C18	Grid C18 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0059	D16	Grid D16 Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
MB0060	B16	Grid B16 DUP Confirmation Wall @ 1.5 ft BG	6/10/2009	SO	DESA - ChemTech	6/10/2009		8/7/2009	
B0063	B16	Grid B16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0064	C15	Grid C15 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0065	D15/16	Grid BD15/16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0066	I20	Grid I16 LTTD Footprint @ 9-12" BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
B0067	J20	Grid I16 LTTD Footprint @ 0-6" BG	6/15/2009	SO	DESA-Datachem	6/15/2009	8/3/2009	8/6/2009	
MB0063	B16	Grid B16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0064	C15	Grid C15 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0065	D15/16	Grid BD15/16 Confirmation Floor @ 2ft BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0066	I20	Grid I20 LTTD Footprint @ 9-12" BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
MB0067	J20	Grid J20 LTTD Footprint @ 0-6" BG	6/15/2009	SO	DESA - ChemTech	6/15/2009		8/7/2009	
B0069	I17	Grid I17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0070	J14a	Grid J14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0071	J14b	Grid J14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0072	J17	Grid J17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0073	K14a	Grid K14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
B0074	K14b	Grid K14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
B0075	X18	2 pt Composite from Suspected Lead @ 18-24" BG	6/16/2009	SO	DESA-Datachem	6/16/2009	8/3/2009	8/6/2009	
MB0069	I17	Grid I17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0070	J14a	Grid J14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0071	J14b	Grid J14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0072	J17	Grid J17 LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0073	K14a	Grid K14a East LTTD Footprint @ 9-12" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0074	K14b	Grid K14b West LTTD Footprint @ 0-8" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
MB0075	X18	2 pt Composite from Suspected Lead @ 18-24" BG	6/16/2009	SO	DESA - ChemTech	6/16/2009	7/7/2009	8/7/2009	
C-18 SWN 0-4'	C-18	Concrete sidewall (north wall) sample in C-18 test pit 0-4' BG	7/20/2009	CONC	Mitkem	7/20/2009		7/24/2009	
C-18 SWN 4-8'	C-18	Concrete sidewall (north wall) sample in C-18 test pit 4-8' BG	7/20/2009	CONC	Mitkem	7/20/2009		7/24/2009	
C-1819 SWE	C-18/19	Sidewall sample along the C-18/19 border @ 12" BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWE 0-4'	C-18	Sidewall (east wall) sample in C-18 test pit @ 0-4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWE 4-8'	C-18	Sidewall (east wall) sample in C-18 test pit @ 4-8' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWS 0-4'	C-18	Sidewall (south wall) sample in C-18 test pit @ 0-4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWS 4-8'	C-18	Sidewall (south wall) sample in C-18 test pit @ 4-8' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWW 0-4'	C-18	Sidewall (west wall) sample in C-18 test pit @ 0-4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWW 4-8'	C-18	Sidewall (west wall) sample in C-18 test pit @ 4-8' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 FL 0-4'	C-18	Floor sample in C-18 test pit @ 4' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 SWT	C-18	Sidewall sample along rail property @ 1' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
C-18 FL 2'	C-18	Floor sample in C-18 @ 2' BG	7/20/2009	SO	Mitkem	7/20/2009		7/24/2009	
MB0076	AC-12	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0077	AC-12	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0078	AC-15	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0079	AC-15	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0080	AC-6	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0081	AC-6	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0082	AC-9	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0083	AF-22	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0084	AF-25	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0085	AF-25	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0086	AF-28	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0087	AF-28	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0088	AF-31	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0089	AF-31	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
MB0090	AF-22	Field duplicate for sample MB0083	7/21/2009	SO	DESA-Datachem	7/21/2009	8/11/2009	10/20/2009	
B0076	AC-12	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0077	AC-12	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0078	AC-15	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0079	AC-15	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0080	AC-6	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0081	AC-6	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0082	AC-9	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0083	AF-22	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0084	AF-25	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0085	AF-25	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0086	AF-28	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0087	AF-28	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0088	AF-31	Waste characterization sample @ 0-6"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0089	AF-31	Waste characterization sample @ 18-24"	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
B0090	AF-22	Field duplicate for sample MB0083	7/21/2009	SO	DESA-KAP Technologies	7/21/2009	8/11/2009	10/20/2009	
MB0091	AD-22	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0092	AD-22	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0093	AD-25	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0094	AD-25	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0095	AD-28	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0096	AD-28	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0097	AD-31	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
MB0098	AD-31	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB0099	AD-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A0	AD-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A1	AD-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A2	AD-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A3	AF-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A4	AF-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A5	AF-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A6	AF-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A7	AF-37	Field duplicate for sample MB00A5	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A8	AD-28	Field duplicate for sample MB0095	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00A9	I-26	Northeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00B0	I-25	Northwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00B1	J-26	Southeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
MB00B2	J-25	Southwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-Datachem	7/22/2009	8/11/2009	10/20/2009	
B0091	AD-22	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0092	AD-22	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0093	AD-25	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0094	AD-25	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0095	AD-28	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0096	AD-28	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0097	AD-31	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0098	AD-31	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B0099	AD-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A0	AD-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A1	AD-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A2	AD-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A3	AF-34	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A4	AF-34	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A5	AF-37	Waste characterization sample @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A6	AF-37	Waste characterization sample @ 18-24"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A7	AF-37	Field duplicate for sample MB00A5	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A8	AD-28	Field duplicate for sample MB0095	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00A9	I-26	Northeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00B0	I-25	Northwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00B1	J-26	Southeast corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
B00B2	J-25	Southwest corner of SES tent structure. Sample taken @ 0-6"	7/22/2009	SO	DESA-KAP Technologies	7/22/2009	8/11/2009	10/20/2009	
C-16 SW N	C-16	Sidewall (north wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
C-16 SW E	C-16	Sidewall (east wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
C-16 SW W	C-16	Sidewall (west wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
C-16 SW S	C-16	Sidewall (south wall) sample in C-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-15 FL	B-15	Floor sample @ 3' BG. ~1' of wood floor was removed, the soil beneath was sampled	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW N	B-16	Sidewall (north wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW E	B-16	Sidewall (east wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW W	B-16	Sidewall (west wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
B-16 SW S	B-16	Sidewall (south wall) sample in B-16 test pit @ 0-6' BG	7/23/2009	SO	Mitkem	7/23/2009	7/30/2009	7/31/2009	
CD-C18-3-NW FV	C-18	Sidewall sample along rail property @ 2' BG	7/29/2009	SO	Mitkem	7/29/2009	8/4/2009	8/12/2009	
CD-C18-2-WW 4-8' TP FV	C-18	Sidewall (west wall) sample in C-18 test pit @ 4-8' BG.	7/29/2009	SO	Mitkem	7/29/2009	8/4/2009	8/12/2009	
CD-C18-4-NW FV	C-18	Sidewall sample along rail property @ 2' BG	8/5/2009	SO	Mitkem	8/4/2009	8/10/2009	8/27/2009	
CD-P34-1-0-2' E	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24"	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-P34-1-0-2' N	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24"	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-P34-1-0-2' S	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24"	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-P34-1-0-2' W	P-34	Waste characterization sample (Dioxin/Furan analysis only) @ 0-24"	8/24/2009	SO	Mitkem	8/24/2009		9/17/2009	
CD-C18-5-NW	C-18	Sidewall sample along rail property @ 2' BG	8/27/2009	SO	Mitkem	8/27/2009	9/2/2009	9/15/2009	
CD-BF-ST-1	Off Site	Off site backfill sample for chemical and radiological analysis	9/2/2009	SO	Mitkem	9/2/2009		10/5/2009	
CD-BF-MX-1	Off Site	Off site backfill sample for chemical and radiological analysis	9/2/2009	SO	Mitkem	9/2/2009		10/5/2009	
CD-Y9-1-SW	Y-9	Sidewall sample along New Market Extension @ 1' BG	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
CD-Y10-1-SW	Y-10	Sidewall sample along New Market Extension @ 1' BG	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-Y11-1-SW	Y-11	Sidewall sample along New Market Extension @ 1' BG	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
DUP090309	Y-9	Field duplicate of CD-Y9-1-SW	9/3/2009	SO	Mitkem	9/3/2009	9/10/2009	9/15/2009	
CD-Z11-1-WW	Z-11	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AA11-1-WW	AA-11	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB11-1-WW	AB-11	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AC12-1-SW	AC-12	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AC13-1-SW	AC-13	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB14-1-SW	AB-14	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB15-1-SW	AB-15	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AA15-1-SW	AA-15	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AA16-1-WW	AA-16	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AB17-1-WW	AB-17	Sidewall sample along New Market Extension @ 1' BG	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
DUP 091009	AB-11	Field duplicate of CD-AB11-1-WW	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
DUP2 091009	AA-15	Field duplicate of CD-AA15-1-SW	9/10/2009	SO	Mitkem	9/10/2009	9/16/2009	10/5/2009	
CD-AC17-1-WW	AC-17	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC18-1-SW	AC-18	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC19-1-SW	AC-19	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC20-1-WW	AC-20	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AC20-1-EW	AC-20	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-AB20-1-EW	AB-20	Sidewall sample along New Market Extension @ 1' BG	9/15/2009	SO	Mitkem	9/15/2009	9/21/2009	10/5/2009	
CD-WC-X18-1	X-18	Sample taken post Maectite treatment	9/16/2009	SO	Mitkem	9/16/2009	9/22/2009	10/5/2009	
CD-AB18-1-FL	AB-18	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB19-1-FL	AB-19	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AA19-1-FL	AA-19	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB20-1-FL	AB-20	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC20-1-FL	AC-20	Floor sample along New Market Extension @ 2'BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC13-2-SW	AC-13	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC14-1-SW	AC-14	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AC15-1-SW	AC-15	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB16-1-SW	AB-16	Sidewall re-sample (due to PCB failure) along New Market Extension @ 1' BG	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
DUP091709	AB-18	Field duplicate sample of CD-AB18-1-FL	9/17/2009	SO	Mitkem	9/17/2009	9/22/2009	10/5/2009	
CD-AB14-1-FL	AB-14	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AB13-1-FL	AB-13	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AC13-1-FL	AC-13	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AA13-1-FL	AA-13	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AB12-1-FL	AB-12	Floor sample along New Market Extension @ 2'BG	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
DUP1092109	AB-13	Field duplicate sample of CD-AB13-1-FL	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
DUP2092109	AC-13	Field duplicate sample of CD-AC13-1-FL	9/21/2009	SO	Mitkem	9/21/2009	9/24/2009	10/9/2009	
CD-AB15-1-FL	AB-15	Floor sample along New Market Extension @ 2'BG	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
CD-AA17-1-FL	AA-17	Floor sample along New Market Extension @ 2'BG	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
CD-AA18-1-FL	AA-18	Floor sample along New Market Extension @ 2'BG	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
DUP092209	AA-18	Field duplicate sample of CD-AA18-1-FL	9/22/2009	SO	Mitkem	9/22/2009	9/25/2009	10/9/2009	
CD-WC-ASPH-1		Waste characterization of ashpalt stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-ASPH-2		Waste characterization of ashpalt stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-1		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-2		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-3		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-DEB-4		Waste characterization of debris stockpile	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
DUP092309		Field duplicated of sample CD-WC-DEB-4	9/23/2009	SO	Mitkem	9/23/2009		10/14/2009	
CD-WC-MPIDRUM-1		Composite sample from MPI drums #7-16 for Pb only analysis	9/23/2009	SO	Mitkem	9/23/2009	9/28/2009	10/20/2009	
CD-AA12-1-FL	AA-12	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AA14-1-FL	AA-14	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AA15-1-FL	AA-15	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AA16-1-FL	AA-16	Floor sample along New Market Extension @ 2'BG	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
DUP092409	AA-15	Field duplicate sample of CD-AA16-1-FL	9/24/2009	SO	Mitkem	9/24/2009	9/29/2009	10/21/2009	
CD-AC9-1-SW	AC-9	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AC10-1-SW	AC-10	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AC11-1-SW	AC-11	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA9-1-NW	AA-9	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA10-1-NW	AA-10	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB9-1-WW	AB-9	Sidewall sample along New Market Extension @ 1' BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB9-1-FL	AB-9	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA10-1-FL	AA-10	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB10-1-FL	AB-10	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AB11-1-FL	AB-11	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-AA11-1-FL	AA-11	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-Z12-1-FL	Z-12	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-Y12-1-FL	Y-12	Floor sample along New Market Extension @ 2'BG	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
DUP1092809	AA-10	Field duplicate sample of CD-AA10-1-NW	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
DUP2092809	AB-9	Field duplicate sample of CD-AB9-1-FL	9/28/2009	SO	Mitkem	9/28/2009	10/1/2009	10/21/2009	
CD-Z13-1-FL	Z-13	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-Z14-1-FL	Z-14	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-Y13-1-FL	Y-13	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-Y14-1-FL	Y-14	Floor sample along New Market Extension @ 2'BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-X9-1-WW	X-9	Sidewall sample along New Market Extension @ 1' BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-W9-1-WW	W-9	Sidewall sample along New Market Extension @ 1' BG	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
DUP092909	Y-13	Field duplicate sample of CD-AB9-1-FL	9/29/2009	SO	Mitkem	9/29/2009	10/5/2009	10/22/2009	
CD-V10-1-WW	V-10	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-U11-1-WW	U-11	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-T11-1-WW	T-11	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-S11-1-WW	S-11	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-S12-1-WW	S-12	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-R12-1-WW	R-12	Sidewall sample along New Market Extension @ 1' BG	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-AB16-1-FL	AB-16	Floor sample along New Market Extension @ 2'BG	9/30/2009	SO	Mitkem	9/30/2009	10/1/2009	10/23/2009	
DUP093009	T-11	Field duplicate sample of CD-T11-1-WW	9/30/2009	SO	Mitkem	9/30/2009	10/2/2009	10/23/2009	
CD-Y15-1-FL	Y-15	Floor sample along New Market Extension @ 2'BG	10/1/2009	SO	Mitkem	10/1/2009	10/7/2009	10/23/2009	
CD-Z15-1-FL	Z-15	Floor sample along New Market Extension @ 2'BG	10/1/2009	SO	Mitkem	10/1/2009	10/7/2009	10/23/2009	
CD-Z16-1-FL	Z-16	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-Z17-1-FL	Z-17	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-Y18-1-FL	Y-18	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-Y19-1-FL	Y-19	Floor sample along New Market Extension @ 2'BG	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
DUP100509	Z-16	Field duplicate sample of CD-Z16-1-FL	10/5/2009	SO	Mitkem	10/5/2009	10/8/2009	10/26/2009	
CD-AA19-1-NW	AA-19	Sidewall sample along New Market Extension @ 1' BG	10/7/2009	SO	Mitkem	10/7/2009	10/14/2009	10/27/2009	
CD-AA20-1-NW	AA-20	Sidewall sample along New Market Extension @ 1' BG	10/7/2009	SO	Mitkem	10/7/2009	10/14/2009	10/27/2009	
CD-Y16-1-FL	Y-16	Floor sample along New Market Extension @ 2'BG	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
CD-Y17-1-FL	Y-17	Floor sample along New Market Extension @ 2'BG	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
CD-Z19-1-NW	Z-19	Sidewall sample along New Market Extension @ 1' BG	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
DUP100809	Y-16	Field duplicate sample of CD-Y16-1-FL	10/8/2009	SO	Mitkem	10/8/2009	10/14/2009	10/27/2009	
CD-V12-1-FL	V-12	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W12-1-FL	W-12	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-X12-1-FL	X-12	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W11-1-FL	W-11	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-X11-1-FL	X-11	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W10-1-FL	W-10	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-X10-1-FL	X-10	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-W9-1-FL	W-9	Floor sample along New Market Extension @ 2'BG	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
DUP101209	W-9	Field duplicate sample of CD-W9-1-FL	10/12/2009	SO	Mitkem	10/12/2009	10/16/2009	11/18/2009	
CD-Z18-1-FL	Z-18	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-V13-1-FL	V-13	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-W13-1-FL	W-13	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-X13-1-FL	X-13	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-X14-1-FL	X-14	Floor sample along New Market Extension @ 2'BG	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
DUP101309	X-14	Field duplicate sample of CD-X14-1-FL	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-WC-CLST-1-N		Waste characterization of clean stockpile	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-WC-CLST-1-S		Waste characterization of clean stockpile	10/13/2009	SO	Mitkem	10/13/2009	10/16/2009	11/11/2009	
CD-W14-1-FL	W-14	Floor sample along New Market Extension @ 2'BG	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-W15-1-FL	W-15	Floor sample along New Market Extension @ 2'BG	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-X15-1-FL	X-15	Floor sample along New Market Extension @ 2'BG	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-AG21-0-6"	AG-21	Waste characterization along Spicer Avenue at 0-6" Refusal at 1'.	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-AG22-0-6"	AG-22	Waste characterization along Spicer Avenue at 0-6" Refusal at 1'.	10/14/2009	SO	Mitkem	10/14/2009	10/20/2009	11/11/2009	
CD-W16-1-FL	W-16	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-W17-1-FL	W-17	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-X16-1-FL	X-16	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-X17-1-FL	X-17	Floor sample along New Market Extension @ 2'BG	10/15/2009	SO	Mitkem	10/15/2009	10/20/2009	11/18/2009	
CD-WC-SCDEB-1		Waste characterization of screened debris stockpile.	10/15/2009	SO	Mitkem	10/15/2009		11/10/2009	
CD-WC-MAEC-1		Waste characterization of Maectite treated material.	10/15/2009	SO	Mitkem	10/15/2009		11/10/2009	
CD-V11-1-FL	V-11	Floor sample along New Market Extension @ 2'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W13-1-WW	W-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W13-1-NW	W-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W13-2-FL	W-13	Floor re-sample due to PCB failure along New Market Extension @ 4'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-1-WW	X-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-1-EW	X-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-X13-1-SW	X-13	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-X13-2-FL	X-13	Floor re-sample due to PCB failure along New Market Extension @ 4'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-1-SW	W-14	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-1-EW	W-14	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-1-NW	W-14	Sidewall sample along New Market Extension @ 3' BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-2-FL	W-14	Floor re-sample due to PCB failure along New Market Extension @ 4'BG	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
DUP102109	V-11	Field duplicate sample of CD-V11-1-FL	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
DUP2102109	W-13	Field duplicate sample of CD-W13-1-WW	10/21/2009	SO	Mitkem	10/21/2009	10/27/2009	11/18/2009	
CD-W14-3-FL	W-14	Floor re-sample due to PCB failure along New Market Extension @ 6'BG	10/27/2009	SO	Mitkem	10/27/2009	10/30/2009	12/3/2009	
CD-W14-2-SW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 3' BG	10/27/2009	SO	Mitkem	10/27/2009	10/30/2009	12/3/2009	
CD-W14-1-WW	W-14	Sidewall sample along New Market Extension @ 5' BG	10/27/2009	SO	Mitkem	10/27/2009	10/30/2009	12/3/2009	
CD-WC-CLASPH-1		Waste characterization of anticipated clean asphalt stockpile	10/28/2009	SO	Mitkem	10/28/2009		11/16/2009	
CD-CLST-2-N		Composite sample from overburden stockpile, north	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-3-N		Composite sample from overburden stockpile, north	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-2-S		Composite sample from overburden stockpile, south	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-3-S		Composite sample from overburden stockpile, south	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-CLST-4-S		Composite sample from overburden stockpile, south	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-WC-STUMP-1		Waste characterization of tree debris stockpile	10/29/2009	SO	Mitkem	10/29/2009		11/30/2009	
CD-V9-1-FL	V-9	Floor sample along New Market Extension @ 2'BG	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-V9-1-NW	V-9	Sidewall sample along New Market Extension @ 1' BG	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
DUP1102909		Field duplicate of CD-CLST-2-N	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
DUP2102909		Field duplicate of CD-CLST-2-S	10/29/2009	SO	Mitkem	10/29/2009	11/4/2009	11/30/2009	
CD-BF-MX-2		Off site backfill sample for chemical and radiological analysis	11/2/2009	SO	Mitkem	11/2/2009		11/19/2009	
CD-X13-3-FL	X-13	Floor re-sample due to PCB failure along New Market Extension @ 6'BG	11/3/2009	SO	Mitkem	11/3/2009	11/5/2009	12/3/2009	
CD-X13-1-NW	X-13	Sidewall sample along New Market Extension @ 5' BG	11/3/2009	SO	Mitkem	11/3/2009	11/5/2009	12/3/2009	
CD-WC-ASPH-1		Waste characterization of asphalt stockpile for Form U analysis	11/4/2009	SO	Mitkem	11/4/2009		11/16/2009	
CD-WC-ASPH-2		Waste characterization of asphalt stockpile for Form U analysis	11/4/2009	SO	Mitkem	11/4/2009		11/16/2009	
CD-W14-3-SW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/4/2009	SO	Mitkem	11/4/2009	11/9/2009	1/12/2010	
CD-W14-2-WW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/4/2009	SO	Mitkem	11/4/2009	11/9/2009	1/12/2010	
CD-CAPAC-1		Pure capacitors sent for PCB analysis	11/5/2009	SO	Mitkem	11/5/2009	11/10/2009	1/4/2010	
CD-W18-1-FL	W-18	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-W19-1-FL	W-19	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-X18-1-FL	X-18	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-X19-1-FL	X-19	Floor sample along New Market Extension @ 2'BG	11/9/2009	SO	Mitkem	11/9/2009	11/13/2009	12/3/2009	
CD-W13-1-WW 4-6'	W-13	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-W14-4-SW	W-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-X14-1-SW	X-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-X14-1-EW	X-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/10/2009	SO	Mitkem	11/10/2009	11/13/2009	1/5/2010	
CD-AA20-1-FL	AA-20	Floor sample along New Market Extension @ 2'BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-AA20-1-EW	AA-20	Sidewall sample along New Market Extension @ 1' BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-Z20-1-FL	Z-20	Floor sample along New Market Extension @ 2'BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-Z20-1-EW	Z-20	Sidewall sample along New Market Extension @ 1' BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-Z19-1-FL	Z-19	Floor sample along New Market Extension @ 3'BG	11/12/2009	SO	Mitkem	11/12/2009	11/17/2009	1/5/2010	
CD-X14-2-SW	X-14	Sidewall re-sample due to PCB failure along New Market Extension @ 5' BG	11/16/2009	SO	Mitkem	11/16/2009	11/19/2009	1/5/2010	
CD-CAPTR-1		Treated (by LTTD unit) capacitors sent for PCB analysis	11/24/2009	SO	Mitkem	11/24/2009	12/3/2009	1/12/2010	
CD-WC-STUMP-2		Stump/tree debris pile in Southwest corner of CDA area	12/17/2009	SO	Mitkem	12/17/2009		1/7/2010	
CD-WC-SCDEB-2		Screen debris pile, sample #2 in the Northeast corner of the CDA area	12/17/2009	SO	Mitkem	12/17/2009		1/7/2010	
CD-POP-CDA		PCB only sample from outside stockpile for LTTD POP test	12/17/2009	SO	Mitkem	12/17/2009	12/21/2009	1/18/2010	
CD-POP-TENT		PCB only sample from inside SES tent for LTTD POP test	12/17/2009	SO	Mitkem	12/17/2009	12/21/2009	1/18/2010	
CD-AB42-1-FL	AB-42	Floor sample along southeastern property line @ 2'BG	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
CD-AA42-1-FL	AA-42	Floor sample along southeastern property line @ 2'BG	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
CD-AA43-1-FL	AA-43	Floor sample along southeastern property line @ 2'BG	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
DUP122209	AA-43	Field duplicate of CD-AA43-1-FL	12/22/2009	SO	Mitkem	12/22/2009	12/31/2009	1/28/2010	
CD-AA44-1-FL 2'	AA-44	Floor sample along southeastern property line @ 2'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Y42-1-FL 6'	Y-42	Floor sample along southeastern property line @ 6'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Y43-1-FL 6'	Y-43	Floor sample along southeastern property line @ 6'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Y43-1-SW 2-6'	Y-43	Sidewall sample along southeastern property line @ ~5'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Z42-1-FL 6'	Z-42	Floor sample along southeastern property line @ 6'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Z42-1-SW 2-6'	Z-42	Sidewall sample along southeastern property line @ ~5'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-Z43-1-FL 2'	Z-43	Floor sample along southeastern property line @ 2'BG	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
DUP010610	Z-43	Field duplicate of CD-Z43-1-FL 2'	1/6/2010	SO	Mitkem	1/6/2010	1/8/2010	1/28/2010	
CD-AA40-1-FL 2'	AA-40	Floor sample along southeastern property line @ 2'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-AA41-1-FL 2'	AA-41	Floor sample along southeastern property line @ 2'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-AB40-1-FL 2'	AB-40	Floor sample along southeastern property line @ 2'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-Z40-1-FL 6'	Z-40	Floor sample along southeastern property line @ 6'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-Z41-1-FL 6'	Z-41	Floor sample along southeastern property line @ 6'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-Y41-1-FL 6'	Y-41	Floor sample along southeastern property line @ 6'BG	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
DUP010710	AB-40	Field duplicate of CD-AB40-1-FL 2'	1/7/2010	SO	Mitkem	1/7/2010	1/11/2010	1/28/2010	
CD-AA37-1-FL	AA-37	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AA38-1-FL	AA-38	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AA39-1-FL	AA-39	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB37-1-FL	AB-37	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB38-1-FL	AB-38	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB39-1-FL	AB-39	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AB41-1-FL	AB-41	Floor sample along southeastern property line @ 2'BG	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
DUP011110	AB-41	Field duplicate of CD-AB41-1-FL	1/11/2010	SO	Mitkem	1/11/2010	1/14/2010	1/28/2010	
CD-AC39-1-FL	AC-39	Floor sample along southeastern property line @ 2'BG. QA sample taken here	1/12/2010	SO	Mitkem	1/12/2010	1/18/2010	1/28/2010	
CD-AC36-1-FL	AC-36	Floor sample along southeastern property line @ 2'BG. QA sample taken here	1/12/2010	SO	Mitkem	1/12/2010	1/18/2010	1/28/2010	
CD-AB36-1-FL	AB-36	Floor sample along southeastern property line @ 2'BG. QA sample taken here	1/12/2010	SO	Mitkem	1/12/2010	1/18/2010	1/28/2010	
CD-AD37-1-SW	AD-37	Sidewall sample along southeastern property line @ ~1'BG. QA sample taken here	1/14/2010	SO	Mitkem	1/14/2010	1/19/2010	1/28/2010	
CD-AD39-1-SW	AD-39	Sidewall sample along southeastern property line @ ~1'BG. QA sample taken here	1/14/2010	SO	Mitkem	1/14/2010	1/19/2010	1/28/2010	
CD-AC37-1-FL	AC-37	Floor sample along southeastern property line @ 2'BG. QA sample taken here	1/14/2010	SO	Mitkem	1/14/2010	1/19/2010	1/28/2010	
CD-WC-SCDEB-3		Waste characterization sample for off-site disposal of screen debris	1/15/2010	SO	Mitkem	1/15/2010		2/3/2010	
CD-WC-SCDEB-4		Waste characterization sample for off-site disposal of screen debris	1/15/2010	SO	Mitkem	1/15/2010		2/3/2010	
CD-WC-SCDEB-5		Waste characterization sample for off-site disposal of screen debris	1/15/2010	SO	Mitkem	1/15/2010		2/3/2010	
CD-BF-MX-3		Sample of Maddox DGA material taken off-site from Weldon quarry	1/18/2010	SO	Mitkem	1/18/2010		2/16/2010	
CD-AA36-1-FL	AA-36	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-AA35-1-FL	AA-35	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-AB35-1-FL	AB-35	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-AC35-1-FL	AC-35	Floor sample along southeastern property line @ 2'BG	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
DUP011910	AA-36	Field duplicate of CD-AA36-1-FL	1/19/2010	SO	Mitkem	1/19/2010	1/21/2009	2/16/2010	
CD-SHALE-PRE		Composite sample of crushed shale material prior to LTTD treatment	1/26/2010	SO	Mitkem	1/26/2010	2/1/2010	2/18/2010	
CD-W40-1-FL	W-40	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-W41-1-FL	W-41	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-X41-1-FL	X-41	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-X42-1-FL	X-42	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/1/2010	SO	Mitkem	2/1/2010	2/4/2010	2/17/2010	
CD-Y39-1-FL	Y-39	Floor sample in southeastern excavation @ 6'BG.	2/4/2010	SO	Mitkem	2/4/2010	2/8/2010	2/23/2010	
CD-Y40-1-FL	Y-40	Floor sample in southeastern excavation @ 6'BG.	2/4/2010	SO	Mitkem	2/4/2010	2/8/2010	2/23/2010	
CD-Z373839-1-FL	Z-373839	Composite floor sample of partial grids in southeastern excavation @ 6'BG.	2/4/2010	SO	Mitkem	2/4/2010	2/8/2010	2/23/2010	
CD-W42-1-FL	W-42	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/8/2010	SO	Mitkem	2/8/2010	2/11/2010	3/1/2010	
CD-X40-1-FL	X-40	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/8/2010	SO	Mitkem	2/8/2010	2/11/2010	3/1/2010	
CD-Y38-1-FL	Y-38	Floor sample in southeastern excavation @ 6'BG. QA split taken here.	2/8/2010	SO	Mitkem	2/8/2010	2/11/2010	3/1/2010	
CD-WC-SCDEB-6		Waste characterization sample for off-site disposal of screen debris	2/15/2010	SO	Mitkem	2/15/2010		3/2/2010	
CD-WC-SCDEB-7		Waste characterization sample for off-site disposal of screen debris	2/15/2010	SO	Mitkem	2/15/2010		3/2/2010	
WIPE-ALLU		Wipe sample taken from inside bucket of Allu	2/17/2010	WIPE	Mitkem	2/17/2010	2/22/2010	2/25/2010	
CD-Z37-1-SW	Z-37	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z38-1-SW	Z-38	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z39-1-SW	Z-39	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z40-1-SW	Z-40	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z41-1-SW	Z-41	Sidewall sample in southeastern excavation @ 5'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Y37-1-FL	Y-37	Floor sample in southeastern excavation @ 6'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Y36-1-FL	Y-36	Floor sample in southeastern excavation @ 6'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-Z36-1-FL	Z-36	Floor sample in southeastern excavation @ 6'BG.	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
DUP021810	Z-39	Field duplicate of sample CD-Z39-1-SW	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
DUP2021810	Z-37	Field duplicate of sample CD-Z37-1-SW	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/12/2010	
CD-WC-Woodblock	T-40	Waste characterization sample for off-site disposal of wood block	2/18/2010	SO	Mitkem	2/18/2010	2/23/2010	3/3/2010	
CD-Y35-1-FL	Y-35	Floor sample in southeastern excavation @ 6'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
CD-Z35-1-FL	Z-35	Floor sample in southeastern excavation @ 6'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
CD-Z35-1-SW	Z-35	Sidewall sample in southeastern excavation @ 5'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
CD-Z36-1-SW	Z-36	Sidewall sample in southeastern excavation @ 5'BG.	2/23/2010	SO	Mitkem	2/23/2010	2/26/2010	3/16/2010	
WIPE-ALLU-2		Wipe sample taken from inside bucket of Allu	2/23/2010	WIPE	Mitkem	2/23/2010	2/26/2010	3/1/2010	
POP-TENT-022510		Material stockpiled in SES tent, believed to have high PCBs for LTTD POP test	2/25/2010	SO	Mitkem	2/25/2010	3/1/2010	3/16/2010	
WIPE-ALLU-3		Wipe sample taken from inside bucket of Allu	3/1/2010	WIPE	Mitkem	2/23/2010	2/26/2010	3/9/2010	
CD-WC-Woodpile-1		Waste characterization sample for off-site disposal of screen debris (with wood blocks)	3/1/2010	SO	Mitkem	3/1/2010		3/16/2010	
CD-WC-Woodpile-2		Waste characterization sample for off-site disposal of screen debris (with wood blocks)	3/1/2010	SO	Mitkem	3/1/2010		3/16/2010	
CD-WC-Cappile-1		Waste characterization sample for off-site disposal of debris (with capacitors)	3/1/2010	SO	Mitkem	3/1/2010		3/16/2010	
CD-X33-1-FL	X-33	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-X34-1-FL	X-34	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Y33-1-FL	Y-33	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Y34-1-FL	Y-34	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Z33-1-FL	Z-33	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-Z34-1-FL	Z-34	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-AA3334-1-FL 2'	AA-3334	Floor sample in southeastern excavation @ 2'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-AA3334-1-FL 6'	AA-3334	Floor sample in southeastern excavation @ 6'BG.	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
DUP030410	AA-3334	Field duplicate of sample CD-AA3334-1-FL 2'	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
DUP2 030410	X-34	Field duplicate of sample CD-X34-1-FL	3/4/2010	SO	Mitkem	3/4/2010	3/9/2010	4/14/2010	
CD-WC-SCDEB-8		Waste characterization sample for off-site disposal of screened debris (sample 8)	3/4/2010	SO	Mitkem	3/4/2010		3/23/2010	
CD-WC-SCDEB-9		Waste characterization sample for off-site disposal of screened debris (sample 9)	3/4/2010	SO	Mitkem	3/4/2010		3/23/2010	
CD-WC-SCDEB-8		Waste characterization sample for off-site disposal of screened debris	3/4/2010	SO	Mitkem	3/4/2010		4/14/2010	
CD-WC-SCDEB-9		Waste characterization sample for off-site disposal of screened debris	3/4/2010	SO	Mitkem	3/4/2010		4/14/2010	
CD-AA33-1-SW	AA-33	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-AA34-1-SW	AA-34	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-Z33-1-WW	Z-33	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-Y33-1-WW	Y-33	Sidewall sample in southeastern excavation @ 5'BG.	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
POP-CDA-030810		Composite of stockpile in CDA area. Material set aside for LTTD POP test	3/8/2010	SO	Mitkem	3/8/2010	3/11/2010	4/14/2010	
CD-R13-1-FL	R-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-S13-1-FL	S-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-T13-1-FL	T-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-T12-1-FL	T-12	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-U13-1-FL	U-13	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-U12-1-FL	U-12	Floor sample in southwestern excavation @ 2'BG.	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
DUP030910	U-13	Field duplicate of sample CD-U13-1-FL	3/9/2010	SO	Mitkem	3/9/2010	3/12/2010	4/14/2010	
CD-WC-OILSOIL-1		Waste characterization sample for off-site disposal of oil saturated soil	3/9/2010	SO	Mitkem	3/9/2010		4/13/2010	
CD-WC-OILSOIL-2		Waste characterization sample for off-site disposal of oil saturated soil	3/9/2010	SO	Mitkem	3/9/2010		4/13/2010	
CD-R14-1-FL	R-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-S14-1-FL	S-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-T14-1-FL	T-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-U14-1-FL	U-14	Floor sample in southwestern excavation @ 6'BG.	3/10/2010	SO	Mitkem	3/10/2010	3/12/2010	4/14/2010	
CD-TU11-1-FL	T/U-11	Floor sample in southwestern excavation @ 2'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-S12-1-FL	S-12	Floor sample in southwestern excavation @ 2'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-V14-1-FL	V-14	Floor sample in southwestern excavation @ 6'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-R14-1-WW	R-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-S14-1-WW	S-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-T14-1-WW	T-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-U14-1-WW	U-14	Sidewall sample in southwestern excavation @ 5'BG.	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
DUP031110	T/U-11	Field duplicate of sample CD-TU11-1-FL	3/11/2010	SO	Mitkem	3/11/2010	3/15/2010	4/16/2010	
CD-WC-OILSOIL-3		Waste characterization sample for off-site disposal of oil saturated soil	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Woodpile-3		Waste characterization sample for off-site disposal of screen debris (with wood blocks)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Woodpile-4		Waste characterization sample for off-site disposal of screen debris (with wood blocks)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Woodpile-5		Waste characterization sample for off-site disposal of screen debris (with wood blocks)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-Cappile-2		Waste characterization sample for off-site disposal of debris (with capacitors)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-ASPH-3		Waste characterization sample for off-site disposal of site asphalt (sample #3)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
CD-WC-ASPH-4		Waste characterization sample for off-site disposal of site asphalt (sample #4)	3/15/2010	SO	Mitkem	3/15/2010		4/13/2010	
POP-1-031710A		Possible POP test material taken in area "A" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-2-031710A		Possible POP test material taken in area "A" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-3-031710A		Possible POP test material taken in area "A" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-1-031710B		Possible POP test material taken in area "B" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-2-031710B		Possible POP test material taken in area "B" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-3-031710B		Possible POP test material taken in area "B" Sample analyzed for PCB, TPH, Lead	3/17/2010	SO	Mitkem	3/17/2010	3/23/2010	5/3/2010	
POP-1-031810D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/18/2010	SO	Mitkem	3/18/2010	3/23/2010	5/3/2010	
POP-2-031810D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/18/2010	SO	Mitkem	3/18/2010	3/23/2010	5/3/2010	
POP-3-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-4-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-5-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-6-031910D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/19/2010	SO	Mitkem	3/19/2010	3/24/2010	5/4/2010	
POP-7-032210D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/22/2010	SO	Mitkem	3/22/2010	3/25/2010	5/17/2010	
POP-8-032210D		Possible POP test material taken in area "D" Sample analyzed for PCB, TPH, Lead	3/22/2010	SO	Mitkem	3/22/2010	3/25/2010	5/17/2010	
Baghouse-Dust		Dust sample from baghouse filter, sample obtained from LTTD pad during changeout	3/20/2010	SO	Mitkem	3/22/2010	3/25/2010	5/4/2010	
POP-1-032310E		Possible POP test material taken in area "E" Sample analyzed for PCB, TPH, Lead	3/23/2010	SO	Mitkem	3/23/2010	4/2/2010	5/4/2010	
POP-2-032310E		Possible POP test material taken in area "E" Sample analyzed for PCB, TPH, Lead	3/23/2010	SO	Mitkem	3/23/2010	4/2/2010	5/4/2010	
POP-3-032310E		Possible POP test material taken in area "E" Sample analyzed for PCB, TPH, Lead	3/23/2010	SO	Mitkem	3/23/2010	4/2/2010	5/4/2010	
CD-U13-2-FL	U-13	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure.	3/25/2010	SO	Mitkem	3/25/2010	4/2/2010	5/17/2010	
CD-U12-2-FL	U-12	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure.	3/25/2010	SO	Mitkem	3/25/2010	4/2/2010	5/17/2010	
CD-S13-2-FL	S-13	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to VOC failure.	3/25/2010	SO	Mitkem	3/25/2010	4/2/2010	5/17/2010	
POP-E-033010		POP test material taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-MID-033010		POP test material taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-W-033010		POP test material taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-SHALE-W-033010		POP test shale taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
POP-SHALE-E-033010		POP test shale taken in south SES tent Sample analyzed for PCB, TPH, Lead	3/30/2010	SO	Mitkem	3/30/2010	4/5/2010	5/17/2010	
CD-S13-1-NW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-S13-1-WW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-S13-1-SW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U12-1-NW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U12-1-WW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U12-1-SW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-3-FL	U-13	Floor sample in southwestern excavation @ 6'BG. Add'l 2' excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-1-NW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-1-WW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U13-1-SW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-U14-2-WW	U-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
DUP040110	S-13	Field duplicate of sample CD-S13-1-SW	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
DUP2040110	U-13	Field duplicate of sample CD-U13-1-NW	4/1/2010	SO	Mitkem	4/1/2010	4/7/2010	5/17/2010	
CD-T39-1-FL	T-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-U39-1-FL	U-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-V39-1-FL	V-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-V38-1-FL	V-38	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-W39-1-FL	W-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-W38-1-FL	W-38	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-X39-1-FL	X-39	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-X38-1-FL	X-38	Floor sample in southeastern excavation @ 6'BG.	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
DUP040510	T-39	Field duplicate of sample CD-T39-1-FL	4/5/2010	SO	Mitkem	4/5/2010	4/9/2010	5/25/2010	
CD-U12-2-NW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-U12-2-WW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-U13-2-NW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure.	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-S13-2-SW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-W18-2-FL	W-18	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to VOC failure.	4/6/2010	SO	Mitkem	4/6/2010	4/12/2010	5/28/2010	
CD-W18-1-SW	W-18	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/7/2010	SO	Mitkem	4/7/2010	4/13/2010	5/28/2010	
CD-S13-2-WW	S-13	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to VOC failure.	4/7/2010	SO	Mitkem	4/7/2010	4/13/2010	5/28/2010	
CD-S14-TP8'	S-14	Sample of test pit at 8' in S14. Instructed by USEPA to sample to check for TCE.	4/7/2010	SO	Mitkem	4/7/2010	4/13/2010	5/28/2010	
CD-S15-1-FL	S-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-S16-1-FL	S-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-S17-1-FL	S-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-S18-1-FL	S-18	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T15-1-FL	T-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T16-1-FL	T-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T17-1-FL	T-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-T18-1-FL	T-18	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-U15-1-FL	U-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-U16-1-FL	U-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-U17-1-FL	U-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V15-1-FL	V-15	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V16-1-FL	V-16	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V17-1-FL	V-17	Floor sample in southwestern excavation @ 6'BG.	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
DUP040810	U-16	Field duplicate of sample CD-U16-1-FL	4/8/2010	SO	Mitkem	4/8/2010	4/15/2010	5/25/2010	
CD-V14-1-SW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-V14-1-WW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-V14-1-EW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-V14-2-FL	V-14	Floor sample in southwestern excavation @ 8'BG. Add'l 2' excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-U14-1-NW	U-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-U14-1-EW	U-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-U14-2-FL	U-14	Floor sample in southwestern excavation @ 8'BG. Add'l 2' excavated due to PCB failure.	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
DUP040910	U-14	Field duplicate of sample CD-U14-1-EW	4/9/2010	SO	Mitkem	4/9/2010	4/15/2010	6/3/2010	
CD-W38-2-FL	W-38	Floor sample in southwestern excavation @ 8'BG. Add'l 2' excavated due to PCB failure.	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-W38-1-SW	W-38	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-W38-1-EW	W-38	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-W38-1-NW	W-38	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/12/2010	SO	Mitkem	4/12/2010	4/21/2010	5/19/2010	
CD-T42-1-EW	T-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-T42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-U42-1-EW	U-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-U42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-V42-1-EW	V-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-V42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-W42-1-EW	W-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-W42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-X42-1-EW	X-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-X42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-Y42-1-EW	Y-42	Sidewall sample along east perimeter @ 5'BG. QA Sample CD-Y42-1-EWMP here.	4/13/2010	SO	Mitkem	4/13/2010	4/21/2010	5/27/2010	
CD-T40-1-FL	T-40	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-T41-1-FL	T-41	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U40-1-FL	U-40	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U41-1-FL	U-41	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-V40-1-FL	V-40	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-V41-1-FL	V-41	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-TU38-1-FL	TU-38	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-X353637-1-FL	X-353637	Floor sample in southeastern excavation @ 6'BG.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-W18-3-FL	W-18	Floor sample in southwestern excavation @ 6'BG. Add'l 2' excavated due to PCB failure.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U12-2-WW	U-12	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U13-2-NW	U-13	Sidewall sample in southwestern excavation @ 5'BG. Add'l excavated due to PCB failure.	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
DUP041410	T-40	Field duplicate of sample CD-T40-1-FL	4/14/2010	SO	Mitkem	4/14/2010	4/21/2010	6/3/2010	
CD-U18-1-FL	U-18	Floor sample in southwestern excavation @ 6'BG.	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
CD-V18-1-FL	V-18	Floor sample in southwestern excavation @ 6'BG.	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-V19-1-FL	V-19	Floor sample in southwestern excavation @ 6'BG.	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
DUP041510		Field duplicate of sample CD-U18-1-FL	4/15/2010	SO	Mitkem	4/15/2010	4/21/2010	6/4/2010	
CD-V14-2-EW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
CD-R15-1-FL	R-15	Floor sample in southwestern excavation @ 6'BG.	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
CD-R16-1-FL	R-16	Floor sample in southwestern excavation @ 6'BG.	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
Baghouse-Dust-2		Dust sample from baghouse filter, sample obtained from LTTD pad during changeout	4/19/2010	SO	Mitkem	4/19/2010	4/23/2010	6/3/2010	
CD-WC-ASPH-5		Waste characterization sample for off-site disposal of site asphalt (sample #5)	4/21/2010	SO	Mitkem	4/21/2010		6/3/2010	
CD-WC-SCDEB-10		Waste characterization sample for off-site disposal of screened debris (sample #10)	4/21/2010	SO	Mitkem	4/21/2010		6/3/2010	
CD-O2-1-WW	O-2	Sidewall sample in small western excavation @ 1'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O3-1-FL	O-3	Floor sample in small western excavation @ 2'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O3-1-NW	O-3	Sidewall sample in small western excavation @ 1'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O4-1-FL	O-4	Floor sample in small western excavation @ 2'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-O4-1-NW	O-4	Sidewall sample in small western excavation @ 1'BG.	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
DUP042210	O-3	Field duplicate of sample CD-O3-1-NW	4/22/2010	SO	Mitkem	4/22/2010	5/10/2010	6/3/2010	
CD-P3-1-FL	P-3	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-P4-1-FL	P-4	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-Q3-1-FL	Q-3	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-Q4-1-FL	Q-4	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-R3-1-FL	R-3	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-R4-1-FL	R-4	Floor sample in small western excavation @ 2'BG.	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
DUP042310	P-3	Field duplicate of sample CD-P3-1-FL	4/23/2010	SO	Mitkem	4/23/2010	5/10/2010	6/3/2010	
CD-P2-1-WW	P-2	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-Q2-1-WW	Q-2	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-Q5-1-EW	Q-5	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-R2-1-WW	R-2	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-R4-1-EW	R-4	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-S3-1-SW	S-3	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-S4-1-EW	S-4	Sidewall sample in small western excavation @ 1'BG.	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
DUP2042610	S-3	Field duplicate of sample CD-S3-1-SW	4/26/2010	SO	Mitkem	4/26/2010	5/10/2010	6/4/2010	
CD-WC-ASPH-6		Waste characterization sample for off-site disposal of site asphalt (sample #6)	4/27/2010	SO	Mitkem	4/27/2010		5/11/2010	
CD-P5-1-FL	P-5	Floor sample in small western excavation @ 2'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-P5-1-NW	P-5	Sidewall sample in small western excavation @ 1'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-P6-1-EW	P-6	Sidewall sample in small western excavation @ 1'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-V14-3-EW	V-14	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-T13-1-FL 6'	T-13	Floor sample in southwestern excavation @ 6'BG. USEPA directed excavation.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-T13-1-WW	T-13	Sidewall sample in southwestern excavation @ 5'BG.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-S13-1-FL 6'	S-13	Floor sample in southwestern excavation @ 6'BG. USEPA directed excavation.	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
DUP042810	P-6	Field duplicate of sample CD-P6-1-EW	4/28/2010	SO	Mitkem	4/28/2010	5/10/2010	6/4/2010	
CD-U12-1-FL 6'	U-12	Floor sample in southwestern excavation @ 6'BG. USEPA directed excavation.	4/29/2010	SO	Mitkem	4/29/2010	5/10/2010	6/4/2010	
CD-P4-2-FL	P-4	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure.	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-NW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-EW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-WW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P4-1-SW	P-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	4/30/2010	SO	Mitkem	4/30/2010	5/10/2010	6/7/2010	
CD-P6-1-FL	P-6	Floor sample in small western excavation @ 2'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-P7-1-FL	P-7	Floor sample in small western excavation @ 2'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-Q5-2-EW	Q-5	Sidewall sample in southwestern excavation @ 1'BG. Add'l excavated due to PCB failure.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-Q6-1-SW	Q-6	Sidewall sample in small western excavation @ 1'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-Q7-1-SW	Q-7	Sidewall sample in small western excavation @ 1'BG.	5/5/2010	SO	Mitkem	5/5/2010	5/20/2010	6/8/2010	
CD-WC-DEB-5		Waste characterization sample for off-site disposal of debris pile (sample #5)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-6		Waste characterization sample for off-site disposal of debris pile (sample #6)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-7		Waste characterization sample for off-site disposal of debris pile (sample #7)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-8		Waste characterization sample for off-site disposal of debris pile (sample #8)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-9		Waste characterization sample for off-site disposal of debris pile (sample #9)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-10		Waste characterization sample for off-site disposal of debris pile (sample #10)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-11		Waste characterization sample for off-site disposal of debris pile (sample #11)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-12		Waste characterization sample for off-site disposal of debris pile (sample #12)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-13		Waste characterization sample for off-site disposal of debris pile (sample #13)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-DEB-14		Waste characterization sample for off-site disposal of debris pile (sample #14)	5/6/2010	SO	Mitkem	5/6/2010		5/24/2010	
CD-WC-S38	S-38	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-S39	S-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-S40	S-40	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-R39	R-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-Q39	Q-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-Q40	Q-40	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-P39	P-39	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-WC-P40	P-40	Waste characterization sample for off-site disposal in-situ	5/10/2010	SO	Mitkem	5/10/2010		5/18/2010	
CD-Q4-2-FL	Q-4	Floor sample in southwestern excavation @ 4'BG. Add'l 2' excavated due to PCB failure.	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-Q4-1-EW	Q-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-Q4-1-WW	Q-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-Q4-1-SW	Q-4	Sidewall sample in southwestern excavation @ 3'BG. Add'l excavated due to PCB failure.	5/10/2010	SO	Mitkem	5/10/2010	5/18/2010	6/17/2010	
CD-U12-1-WW 7'	U-12	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-U12-1-NW 7'	U-12	Sidewall sample in southwestern excavation @ 7'BG. Add'l excavated due to PCB failure.	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-T13-1-FL 8'	T-13	Floor sample in southwestern excavation @ 8'BG. USEPA directed excavation.	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-MI-PER	T-4	Pre-LTTD treatment sample of material with strong perfume odor	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
DUP2051010	U-12	Field duplicate of sample CD-U12-1-WW 7'	5/10/2010	SO	Mitkem	5/10/2010	5/20/2010	6/17/2010	
CD-WC-O36	O-36	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-O37	O-37	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-O38	O-38	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-O39	O-39	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P36	P-36	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P37	P-37	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P38	P-38	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-Q36	Q-36	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-Q37	Q-37	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-Q38	Q-38	Waste characterization sample for off-site disposal in-situ	5/11/2010	SO	Mitkem	5/11/2010		5/24/2010	
CD-WC-P32	P-32	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-P33	P-33	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-P34	P-34	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-P35	P-35	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O32	O-32	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O33	O-33	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O34	O-34	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-WC-O35	O-35	Waste characterization sample for off-site disposal in-situ	5/12/2010	SO	Mitkem	5/12/2010		5/24/2010	
CD-P34-1-0-4' E	P-34	Dioxin sample in grid P-34 East	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-P34-1-0-4' N	P-34	Dioxin sample in grid P-34 North	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-P34-1-0-4' W	P-34	Dioxin sample in grid P-34 West	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-P34-1-0-4' M	P-34	Dioxin sample in grid P-34 Middle	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/10/2010	
CD-R17-1-FL	R-17	Floor sample in southwestern excavation @ 6'BG.	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/24/2010	
CD-R18-1-FL	R-18	Floor sample in southwestern excavation @ 6'BG.	5/12/2010	SO	Mitkem	5/12/2010	5/20/2010	6/24/2010	
CD-WC-ASPH-7		Waste characterization sample for off-site disposal of asphalt pile (pile #7)	5/17/2010	SO	Mitkem	5/17/2010		6/24/2010	
CD-WC-SCDEB-11		Waste characterization sample for off-site disposal of screened debris pile (pile #11)	5/21/2010	SO	Mitkem	5/21/2010		6/24/2010	
CD-AD39-1-SW	AD-39	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD39-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD40-1-SW	AD-40	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD40-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD41-1-SW	AD-41	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD41-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD42-1-SW	AD-42	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD42-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AD43-1-SW	AD-43	Sidewall sample south perimeter @ 1'BG. QA Sample CD-AD43-1-SWMP here.	5/24/2010	SO	Mitkem	5/24/2010	6/3/2010	6/24/2010	
CD-AB43-1-FL	AB-43	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC40-1-FL	AC-40	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC41-1-FL	AC-41	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC42-1-FL	AC-42	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AC43-1-FL	AC-43	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AD39-1-FL	AD-39	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AD4041-1-FL	AD-4041	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-AD4243-1-FL	AD-4243	Floor sample along south perimeter @ 2'BG.	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
DUP052510	AC-43	Field duplicate of sample CD-AC43-1-FL	5/25/2010	SO	Mitkem	5/25/2010	6/4/2010	6/24/2010	
CD-WC-STUMP-3		Waste characterization sample for off-site disposal of tree and stump debris	5/25/2010	SO	Mitkem	5/25/2010		6/8/2010	
CD-S3-1-FL	S-3	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-S4-1-FL	S-4	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-S5-1-FL	S-5	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-T3-1-FL	T-3	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-T4-1-FL	T-4	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-T5-1-FL	T-5	Floor sample in southwestern excavation @ 2'BG.	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
DUP052610	S-3	Field duplicate of sample CD-S3-1-FL	5/26/2010	SO	Mitkem	5/26/2010	6/7/2010	6/24/2010	
CD-S6-1-FL	S-6	Floor sample in southwestern excavation @ 2'BG.	5/27/2010	SO	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-S7-1-FL	S-7	Floor sample in southwestern excavation @ 2'BG.	5/27/2010	SO	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-S40-C	S-40	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O32-C	O-32	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O33-C	O-33	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O34-C	O-34	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O35-C	O-35	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O36-C	O-36	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-O37-C	O-37	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P32-C	P-32	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P33-C	P-33	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P34-C	P-34	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-P36-C	P-36	Waste characterization sample for off-site disposal of capacitors found in grid	5/27/2010	CAP	Mitkem	5/27/2010	6/3/2010	6/24/2010	
CD-WC-SCDEB-12		Waste characterization sample for off-site disposal of screened debris pile (pile #12)	6/8/2010	SO	Mitkem	6/8/2010		6/18/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-M-O39	O-39	Waste characterization sample for off-site disposal post Maectite treatment	6/8/2010	SO	Mitkem	6/8/2010	6/14/2010	6/30/2010	
CD-WC-M-P40	P-40	Waste characterization sample for off-site disposal post Maectite treatment	6/8/2010	SO	Mitkem	6/8/2010	6/14/2010	6/30/2010	
CD-WC-M-P38	P-38	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-P39	P-39	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-R39	R-39	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-R40	R-40	Waste characterization sample for off-site disposal post Maectite treatment	6/9/2010	SO	Mitkem	6/9/2010	6/14/2010	6/30/2010	
CD-WC-M-Q37	Q-37	Waste characterization sample for off-site disposal post Maectite treatment	6/14/2010	SO	Mitkem	6/14/2010	6/17/2010	7/1/2010	
CD-WC-M-Q38	Q-38	Waste characterization sample for off-site disposal post Maectite treatment	6/14/2010	SO	Mitkem	6/14/2010	6/17/2010	7/1/2010	
CD-WC-M-2-P38	P-38	Waste characterization sample for off-site disposal post Maectite re-treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-M-2-P39	P-39	Waste characterization sample for off-site disposal post Maectite re-treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-M-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-M-Cappile1		Waste characterization sample for off-site disposal post Maectite treatment	6/15/2010	SO	Mitkem	6/15/2010	6/18/2010	7/1/2010	
CD-WC-ASPH-8		Waste characterization sample for off-site disposal of asphalt pile (pile #8)	6/15/2010	SO	Mitkem	6/15/2010		6/25/2010	
CD-WC-SCDEB-13		Waste characterization sample for off-site disposal of screened debris pile (pile #13)	6/22/2010	SO	Mitkem	6/22/2010		7/8/2010	
CD-I56-1-FL	I-5/I-6	Floor sample in southwestern excavation @ 2'BG. 1 sample taken for partial grids	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-J5-1-FL	J-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-J6-1-FL	J-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-K5-1-FL	K-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-K6-1-FL	K-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-L5-1-FL	L-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-L6-1-FL	L-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-M5-1-FL	M-5	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-M6-1-FL	M-6	Floor sample in western excavation @ 2'BG.	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
DUP062410	K-5	Field duplicate of sample CD-K5-1-FL	6/24/2010	SO	Mitkem	6/24/2010	6/30/2010	7/22/2010	
CD-I5-1-NW	I-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-I5-1-WW	I-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-I5-1-NW	I-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-I5-1-WW	I-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-J5-1-WW	J-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-J6-1-EW	J-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-L6-1-EW	L-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M5-1-WW	M-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M5-1-SW	M-5	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M6-1-EW	M-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-M6-1-SW	M-6	Sidewall sample in western excavation @ 1'BG.	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
DUP062810	M-6	Field duplicate of sample CD-M6-1-EW	6/28/2010	SO	Mitkem	6/28/2010	7/2/2010	7/28/2010	
CD-WC-M-3-P38	P-38	Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-WC-M-3-P39	P-39	Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-WC-M-2-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-WC-M-2-Cappile1		Waste characterization sample for off-site disposal post Maectite re-treatment	6/30/2010	SO	Mitkem	6/30/2010	7/2/2010	7/14/2010	
CD-Q15-1-FL	Q-15	Floor sample in central excavation @ 6'BG.	7/6/2010	SO	Mitkem	7/6/2010	7/12/2010	7/28/2010	
CD-Q16-1-FL	Q-16	Floor sample in central excavation @ 6'BG.	7/6/2010	SO	Mitkem	7/6/2010	7/12/2010	7/28/2010	
CD-WC-M-3-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	7/6/2010	SO	Mitkem	7/6/2010	7/12/2010	7/16/2010	
CD-AG23-0-6"	AG-23	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG24-0-6"	AG-24	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG25-0-6"	AG-25	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG26-0-6"	AG-26	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG27-0-6"	AG-27	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG28-0-6"	AG-28	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG29-0-6"	AG-29	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG30-0-6"	AG-30	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG31-0-6"	AG-31	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG32-0-6"	AG-32	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG33-0-6"	AG-33	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG34-0-6"	AG-34	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG35-0-6"	AG-35	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG36-0-6"	AG-36	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG37-0-6"	AG-37	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-AG38-0-6"	AG-38	Sample between fenceline and Spicer Ave	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
DUP070710	AG-28	Field duplicate of sample CD-AG28-0-6"	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
DUP2070710	AG-32	Field duplicate of sample CD-AG32-0-6"	7/7/2010	SO	Mitkem	7/7/2010	7/12/2010	8/2/2010	
CD-Z43-1-EW	Z-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AA43-1-EW	AA-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AB43-1-EW	AB-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AC43-1-EW	AC-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-AD43-1-EW	AD-43	Sidewall sample taken along eastern perimeter @ 1'BG. QA Sample taken here.	7/8/2010	SO	Mitkem	7/8/2010	7/15/2010	7/28/2010	
CD-WC-SCDEB-14		Waste characterization sample for off-site disposal of screened debris pile (pile #14)	7/12/2010	SO	Mitkem	7/12/2010		7/26/2010	
CD-Q15-1-WW	Q-15	Sidewall sample in central excavation @ 5'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-Q17-1-FL	Q-17	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-Q18-1-FL	Q-18	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-Q19-1-FL	Q-19	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-R19-1-FL	R-19	Floor sample in central excavation @ 6'BG.	7/12/2010	SO	Mitkem	7/12/2010	7/15/2010	8/2/2010	
CD-WC-SCDEB-15		Waste characterization sample for off-site disposal of screened debris pile (pile #15)	7/13/2010	SO	Mitkem	7/13/2010		7/26/2010	
CD-WC-ASPH-9		Waste characterization sample for off-site disposal of asphalt pile (pile #9)	7/14/2010	SO	Mitkem	7/14/2010		7/27/2010	
CD-LK3-1-FL	L/K-3	Floor sample in western excavation @ 2'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-L3-1-SW	L-3	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-L4-1-SW	L-4	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-K3-1-NW	K-3	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-K4-1-NW	K-4	Sidewall sample in western excavation @ 1'BG.	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
DUP071410	L-3	Field duplicate of sample CD-L3-1-SW	7/14/2010	SO	Mitkem	7/14/2010	7/19/2010	8/2/2010	
CD-WC-TANK		Waste characterization sample for off-site disposal of tank pile	7/15/2010	SO	Mitkem	7/15/2010		7/27/2010	
CD-WC-M-4-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	7/22/2010	SO	Mitkem	7/22/2010	7/27/2010	8/10/2010	
CD-NWST-1		Overburden taken from northwest area of site, removed for regrading purposes	7/27/2010	SO	Mitkem	7/27/2010	7/30/2010	8/12/2010	
CD-NWST-2		Overburden taken from northwest area of site, removed for regrading purposes	7/27/2010	SO	Mitkem	7/27/2010	7/30/2010	8/12/2010	
DUP072710		Field duplicate of sample CD-NWST-2	7/27/2010	SO	Mitkem	7/27/2010	7/30/2010	8/12/2010	
CD-WC-M-5-Q36	Q-36	Waste characterization sample for off-site disposal post Maectite re-treatment	7/30/2010	SO	Mitkem	7/31/2010	8/3/2010	8/12/2010	
CD-H5-1-FL	H-5	Floor sample @ 2'BG. Sample taken after fuel odors were reported in the area.	8/3/2010	SO	Mitkem	8/3/2010	8/6/2010	8/24/2010	
CD-WC-SCDEB-15-2		Resample of screened debris pile #15 for PCBs only	8/3/2010	SO	Mitkem	8/3/2010	8/6/2010	8/24/2010	
CD-TS-MX-1	Offsite	Sample taken of off-site material to be used as on site top soil	8/5/2010	SO	Mitkem	8/5/2010	8/10/2010	9/16/2010	
CD-SO-MX-1	Offsite	Sample taken of off-site material to be used as on site soil	8/5/2010	SO	Mitkem	8/5/2010	8/10/2010	9/16/2010	
CD-WC-ASPH-10		Waste characterization sample for off-site disposal of asphalt (pile #10)	8/9/2010	SO	Mitkem	8/9/2010		8/23/2010	
CD-WC-SCDEB-16-1		Waste characterization sample for off-site disposal of screened debris (pile #16)	8/9/2010	SO	Mitkem	8/9/2010		8/23/2010	
CD-WC-SCDEB-16-2		Waste characterization sample for off-site disposal of screened debris (pile #16)	8/9/2010	SO	Mitkem	8/9/2010		8/23/2010	
CD-WC-SCDEB-17		Waste characterization sample for off-site disposal of screened debris (pile #17)	8/13/2010	SO	Mitkem	8/13/2010		8/31/2010	
CD-O8-1-FL		Floor sample @ 2'BG. Sample taken after fuel odors were reported in the area.	8/13/2010	SO	Mitkem	8/13/2010	8/19/2010	8/31/2010	
CD-X20-1-WW	X-20	Sidewall sample in southern 14' excavation. Sample taken @ ~13' BG.	8/16/2010	SO	Mitkem	8/16/2010	8/20/2010	8/31/2010	
CD-Y20-1-WW	Y-20	Sidewall sample in southern 14' excavation. Sample taken @ ~13' BG.	8/16/2010	SO	Mitkem	8/16/2010	8/20/2010	8/31/2010	
CD-Y20-1-SW	Y-20	Sidewall sample in southern 14' excavation. Sample taken @ ~13' BG.	8/16/2010	SO	Mitkem	8/16/2010	8/20/2010	8/31/2010	
CD-AA28-1-FL	AA-28	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/18/2010	SO	Mitkem	8/18/2010	8/23/2010	9/20/2010	
CD-AB27-1-FL	AB-27	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/18/2010	SO	Mitkem	8/18/2010	8/23/2010	9/20/2010	
CD-AB28-1-FL	AB-28	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/18/2010	SO	Mitkem	8/18/2010	8/23/2010	9/20/2010	
CD-AB27-1-SW	AB-27	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB27-1-WW	AB-27	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB28-1-SW	AB-28	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB29-1-FL	AB-29	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AB29-1-SW	AB-29	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-FL 2'	AA-29	Floor sample @ 2'BG. Sample taken after capacitors and trash/debris pit was removed.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-FL 6'	AA-29	Floor sample @ 6'BG. Sample taken after capacitors and trash/debris pit was removed.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-NW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-EW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-WW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA29-1-SW 5'	AA-29	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
DUP081910	AA-29	Field duplicate of sample CD-AA29-1-WW 5'	8/19/2010	SO	Mitkem	8/19/2010	8/24/2010	9/20/2010	
CD-AA30-1-NW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA30-1-EW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA30-1-WW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA30-1-SW	AA-30	Sidewall sample @ 5'BG. Sample taken after capacitors and trash/debris pit was removed.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA31-1-FL	AA-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB30-1-FL	AB-30	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB30-1-SW	AB-30	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB31-1-FL	AB-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AB31-1-SW	AB-31	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/23/2010	SO	Mitkem	8/23/2010	8/26/2010	9/20/2010	
CD-AA32-1-FL	AA-32	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB32-1-FL	AB-32	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB32-1-SW	AB-32	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB33-1-FL	AB-33	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB33-1-SW	AB-33	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/24/2010	SO	Mitkem	8/24/2010	8/27/2010	9/20/2010	
CD-AB34-1-FL	AB-34	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/25/2010	SO	Mitkem	8/25/2010	8/30/2010	9/29/2010	
CD-AB34-1-SW	AB-34	Sidewall sample @ 1'BG. Sample taken after capacitors were noted in the area.	8/25/2010	SO	Mitkem	8/25/2010	8/30/2010	9/29/2010	
CD-WC-SCDEB-18		Waste characterization sample for off-site disposal of screened debris (pile #18)	8/27/2010	SO	Mitkem	8/28/2010		9/10/2010	
CD-Z29-1-FL	Z-29	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-FL 2'	Z-30	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-FL 8'	Z-30	Floor sample @ 8'BG. Sample taken after capacitors and trash/debris pit was removed.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-NW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-EW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-WW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z30-1-SW 7'	Z-30	Sidewall sample @ 7'BG. Sample taken after capacitors and trash/debris pit was removed.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Z31-1-FL	Z-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
DUP083110	Z-31	Field duplicate of sample CD-Z31-1-FL	8/31/2010	SO	Mitkem	8/31/2010	9/3/2010	10/1/2010	
CD-Y29-1-FL	Y-29	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-Y30-1-FL	Y-30	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-Y31-1-FL	Y-31	Floor sample @ 2'BG. Sample taken after capacitors were noted in the area.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-AF23-1-FL	AF-23	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF23-1-SW	AF-23	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF24-1-FL	AF-24	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF24-1-SW	AF-24	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF25-1-FL	AF-25	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF25-1-SW	AF-25	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF26-1-FL	AF-26	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF26-1-SW	AF-26	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF27-1-FL	AF-27	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-AF27-1-SW	AF-27	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
DUP090110	Y-31	Field duplicate of sample CD-Y31-1-FL	9/1/2010	SO	Mitkem	9/1/2010	9/7/2010	10/5/2010	
CD-WC-SCDEB-19-1		Waste characterization sample for off-site disposal of screened debris (pile #19)	9/1/2010	SO	Mitkem	9/1/2010		10/5/2010	
CD-WC-SCDEB-19-2		Waste characterization sample for off-site disposal of screened debris (pile #19)	9/1/2010	SO	Mitkem	9/1/2010		10/5/2010	
CD-AF28-1-FL	AF-28	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF28-1-SW	AF-28	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF29-1-FL	AF-29	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF29-1-SW	AF-29	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF30-1-FL	AF-30	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF30-1-SW	AF-30	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF31-1-FL	AF-31	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF31-1-SW	AF-31	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF32-1-FL	AF-32	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF32-1-SW	AF-32	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF33-1-FL	AF-33	Floor sample @ 2'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF33-1-SW	AF-33	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/2/2010	SO	Mitkem	9/2/2010	9/8/2010	10/5/2010	
CD-AF23-2-FL	AF-23	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF24-2-FL	AF-24	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF25-2-FL	AF-25	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF26-2-FL	AF-26	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF27-2-FL	AF-27	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF28-2-FL	AF-28	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF29-2-FL	AF-29	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF30-2-FL	AF-30	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF31-2-FL	AF-31	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF32-2-FL	AF-32	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF33-2-FL	AF-33	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF34-1-FL	AF-34	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF35-1-FL	AF-35	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF36-1-FL	AF-36	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF37-1-FL	AF-37	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF38-1-FL	AF-38	Floor sample @ 3'BG. Sample taken per USEPA/USACE instruction.	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
DUP1091410	AF-25	Field duplicate of sample CD-AF25-2-FL	9/14/2010	SO	Mitkem	9/14/2010	9/17/2010	10/5/2010	
CD-AF34-1-SW	AF-34	Sidewall sample @ 1'BG. QA sample CD-AF34-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF35-1-SW	AF-35	Sidewall sample @ 1'BG. QA sample CD-AF35-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF36-1-SW	AF-36	Sidewall sample @ 1'BG. QA sample CD-AF36-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF37-1-SW	AF-37	Sidewall sample @ 1'BG. QA sample CD-AF37-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF38-1-SW	AF-38	Sidewall sample @ 1'BG. QA sample CD-AF38-1-SWMP taken here.	9/15/2010	SO	Mitkem	9/15/2010	9/20/2010	10/5/2010	
CD-AF38-1-EW	AF-38	Sidewall sample @ 1'BG. Sample taken per USEPA/USACE instruction.	9/16/2010	SO	Mitkem	9/16/2010	9/21/2010	10/9/2010	
CD-W20-1-FL	W-20	Floor sample in south central excavation @ 14' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-X20-1-FL	X-20	Floor sample in south central excavation @ 14' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-Y20-1-FL	Y-20	Floor sample in south central excavation @ 14' BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-W20-1-WW	W-20	Sidewall sample in south central excavation @ 13 BG.	9/20/2010	SO	Mitkem	9/20/2010	9/27/2010	10/18/2010	
CD-Y21-1-FL	Y-21	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y21-1-SW	Y-21	Sidewall sample in south central excavation @ 13 BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y22-1-FL	Y-22	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z22-1-SW	Z-22	Sidewall sample in south central excavation @ 13 BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y23-1-FL	Y-23	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z23-1-SW	Z-23	Sidewall sample in south central excavation @ 13 BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Y24-1-FL	Y-24	Floor sample in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z24-1-SW	Z-24	Sidewall sample in south central excavation @ 13 BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
CD-Z2324-1-FL	Z-23&24	Floor sample (in partially excavated grids) in south central excavation @ 14' BG.	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	
DUP092210	Y-23	Field duplicate of sample CD-Y23-1-FL	9/22/2010	SO	Mitkem	9/22/2010	9/27/2010	10/26/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-M-6-Q36	Q-36	Waste characterization sample for off-site disposal post Quick Lime treatment	9/23/2010	SO	Mitkem	9/23/2010	9/28/2010	10/26/2010	
CD-W20-2-FL	W-20	Floor re-sample due to PCB failure in south central excavation @ 16' BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-WW 15'	W-20	Sidewall sample in south central excavation @ 15 BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-EW	W-20	Sidewall sample in south central excavation @ 15 BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-NW	W-20	Sidewall sample in south central excavation @ 15 BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-1-SW	W-20	Sidewall sample in south central excavation @ 15 BG.	9/24/2010	SO	Mitkem	9/24/2010	9/28/2010	10/26/2010	
CD-W20-2-WW 15'	W-20	Sidewall sample in south central excavation @ 15 BG. Re-sample due to PCB failure.	9/29/2010	SO	Mitkem	9/29/2010	10/4/2010	11/3/2010	
CD-W20-2-NW	W-20	Sidewall sample in south central excavation @ 15 BG. Re-sample due to PCB failure.	9/29/2010	SO	Mitkem	9/29/2010	10/4/2010	11/3/2010	
CD-BF-MX-4	Offsite	Off site backfill sample for chemical and radiological analysis	10/4/2010	SO	Mitkem	10/4/2010	10/7/2010	12/11/2010	
CD-WC-CONC-1		Waste characterization sample for off-site disposal of concrete debris pile	10/5/2010	SO	Mitkem	10/5/2010		10/18/2010	
CD-X21-1-FL	X-21	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-X22-1-FL	X-22	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-W21-1-FL	W-21	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-W22-1-FL	W-22	Floor sample in south central excavation @ 14' BG.	10/11/2010	SO	Mitkem	10/11/2010	10/14/2010	11/19/2010	
CD-X23-1-FL	X-23	Floor sample in south central excavation @ 14' BG.	10/13/2010	SO	Mitkem	10/13/2010	10/18/2010	11/23/2010	
CD-EPA-OIL	W-20	Oil substance in north wall of grid W-20 sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-EPA-C1	V-22	Surface capacitors in area of grid V-22 sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-EPA-C2	U/V-23/24	Surface capacitors in area of grid U/V-23/24 sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-EPA-D1	V-24	Surface soil in area of grid V-24 (specifically MW 11) sampled at request of USEPA.	10/20/2010	SO	Mitkem	10/20/2010	10/25/2010	11/19/2010	
CD-WC-Woodchip		Waste characterization sample for off-site disposal of wood chip pile	10/25/2010	SO	Mitkem	10/25/2010		11/5/2010	
CD-WC-SCDEB-20		Waste characterization sample for off-site disposal of screened debris (pile #20)	10/25/2010	SO	Mitkem	10/25/2010		11/5/2010	
CD-P16-1-FL	P-16	Floor sample in central excavation @ 6' BG.	10/25/2010	SO	Mitkem	10/25/2010	10/28/2010	11/19/2010	
CD-ON16-1-FL	O/N-16	Floor sample in central excavation @ 6' BG. One sample taken for two partial grids.	10/25/2010	SO	Mitkem	10/25/2010	10/28/2010	11/19/2010	
CD-P15-1-WW	P-15	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-O16-1-WW	O-16	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-N16-1-WW	N-16	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-M16-1-WW	M-16	Sidewall sample in central excavation @ 5' BG.	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
DUP102610	M-16	Field duplicate of sample CD-M16-1-WW	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-Micafilm		Sampled mica films in screened soil	10/26/2010	SO	Mitkem	10/26/2010	10/29/2010	11/23/2010	
CD-M1617-1-FL	M-1617	Floor sample in central excavation @ 6' BG. One sample taken for two partial grids.	10/27/2010	SO	Mitkem	10/27/2010	11/1/2010	11/23/2010	
CD-M18-1-FL	M-18	Floor sample in central excavation @ 6' BG.	10/27/2010	SO	Mitkem	10/27/2010	11/1/2010	11/23/2010	
CD-L1819-1-FL	L-1819	Floor sample in central excavation @ 6' BG. One sample taken for two partial grids.	10/27/2010	SO	Mitkem	10/27/2010	11/1/2010	11/23/2010	
CD-L16-1-NW	L-16	Sidewall sample in central excavation @ 5' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-L17-1-NW	L-17	Sidewall sample in central excavation @ 5' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-L18-1-NW	L-18	Sidewall sample in central excavation @ 5' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-O17-1-FL	O-17	Floor sample in central excavation @ 6' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-P17-1-FL	P-17	Floor sample in central excavation @ 6' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-N17-1-FL	N-17	Floor sample in central excavation @ 6' BG.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-P15-WP	P-15	Soil sample in central excavation of material surrounding the 36" water main.	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
DUP102810	L-17	Field duplicate of sample CD-L17-1-NW	10/28/2010	SO	Mitkem	10/28/2010	11/2/2010	11/23/2010	
CD-P16-WP	P-16	Soil sample in central excavation of material surrounding the 36" water main.	10/29/2010	SO	Mitkem	10/29/2010	11/2/2010	11/24/2010	
CD-O16-2-FL	O-16	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	10/29/2010	SO	Mitkem	10/29/2010	11/2/2010	11/24/2010	
CD-N16-2-FL	N-16	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	10/29/2010	SO	Mitkem	10/29/2010	11/2/2010	11/24/2010	
CD-L20-1-FL	L-20	Floor sample in central excavation @ 6' BG.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-L19-1-NW	L-19	Sidewall sample in central excavation @ 5' BG.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-L20-1-NW	L-20	Sidewall sample in central excavation @ 5' BG.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-P15-2-WW	P-15	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-O16-2-WW	O-16	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure.	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
DUP110110	L-19	Field duplicate of sample CD-L19-1-NW	11/1/2010	SO	Mitkem	11/1/2010	11/5/2010	11/24/2010	
CD-O16-1-SW	O-16	Sidewall sample in central excavation @ 7' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-N16-1-NW	N-16	Sidewall sample in central excavation @ 7' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-O17-2-FL	O-17	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-N17-2-FL	N-17	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-P17-WP	P-17	Soil sample in central excavation of material surrounding the 36" water main.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-M19-1-FL	M-19	Floor sample in central excavation @ 6' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-L21-1-FL	L-21	Floor sample in central excavation @ 6' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-L21-1-NW	L-21	Sidewall sample in central excavation @ 5' BG.	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
DUP110310	O-16	Field duplicate of sample CD-O16-1-SW	11/3/2010	SO	Mitkem	11/3/2010	11/8/2010	11/24/2010	
CD-M20-1-FL	M-20	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-M21-1-FL	M-21	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-N18-1-FL	N-18	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-O18-1-FL	O-18	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-P18-1-FL	P-18	Floor sample in central excavation @ 6' BG.	11/8/2010	SO	Mitkem	11/8/2010	11/12/2010	12/10/2010	
CD-O16-2-SW	O-16	Sidewall sample in central excavation @ 7' BG. Add'l 2' excavated due to PCB failure.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-3-FL	O-17	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-1-NW	O-17	Sidewall sample in central excavation @ 9' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-1-WW	O-17	Sidewall sample in central excavation @ 9' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-O17-1-SW	O-17	Sidewall sample in central excavation @ 9' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-N17-1-NW	N-17	Sidewall sample in central excavation @ 7' BG.	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
DUP110910	O-17	Field duplicate of sample CD-O17-1-SW	11/9/2010	SO	Mitkem	11/9/2010	11/15/2010	1/18/2011	
CD-WC-SCDEB-21		Waste characterization sample for off-site disposal of screened debris (pile #21)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-WC-SCDEB-22-1		Waste characterization sample for off-site disposal of screened debris (pile #22)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-WC-SCDEB-22-2		Waste characterization sample for off-site disposal of screened debris (pile #22)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-SCDEB-22-3		Waste characterization sample for off-site disposal of screened debris (pile #22)	11/9/2010	SO	Mitkem	11/9/2010		11/24/2010	
CD-N19-1-FL	N-19	Floor sample in central excavation @ 6' BG.	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-O19-1-FL	O-19	Floor sample in central excavation @ 6' BG.	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-P19-1-FL	P-19	Floor sample in central excavation @ 6' BG.	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-TP-T21	T-21	Test pit in grid T-21 to determine lead and capacitor disposal area	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-TP-U25	U-25	Test pit in grid U-25 to determine lead and capacitor disposal area	11/10/2010	SO	Mitkem	11/10/2010	11/15/2010	1/24/2010	
CD-O18-2-FL	O-18	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	11/11/2010	SO	Mitkem	11/11/2010	11/16/2010	1/24/2010	
CD-P18-2-FL	P-18	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	11/11/2010	SO	Mitkem	11/11/2010	11/16/2010	1/24/2010	
CD-O16-3-SW	O-16	Sidewall sample in central excavation @ 7' BG. Add'l 2' excavated due to PCB failure.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-O17-2-SW	O-17	Sidewall sample in central excavation @ 9' BG. Add'l 2' excavated due to PCB failure.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-N20-1-FL	N-20	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-N21-1-FL	N-21	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-O20-1-FL	O-20	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P20-1-FL	P-20	Floor sample in central excavation @ 6' BG.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P18-3-FL	P-18	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P19-2-FL	P-19	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	11/15/2010	SO	Mitkem	11/15/2010	11/19/2010	1/24/2010	
CD-P18-1-SW	P-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-P18-1-WW	P-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-O18-3-FL	O-18	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-O18-1-NW	O-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-O18-1-EW	O-18	Sidewall sample in central excavation @ 9' BG.	11/16/2010	SO	Mitkem	11/16/2010	11/22/2010	1/24/2010	
CD-Q20-1-FL	Q-20	Floor sample in central excavation @ 6' BG.	11/17/2010	SO	Mitkem	11/17/2010	11/23/2010	12/30/2010	
CD-R20-1-FL	R-20	Floor sample in central excavation @ 6' BG.	11/17/2010	SO	Mitkem	11/17/2010	11/23/2010	12/30/2010	
CD-N17-1-EW	N-17	Sidewall sample in central excavation @ 7' BG.	11/17/2010	SO	Mitkem	11/17/2010	11/23/2010	12/30/2010	
CD-P21-1-FL	P-21	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-Q21-1-FL	Q-21	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-R21-1-FL	R-21	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-S19-1-FL	S-19	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-T19-1-FL	T-19	Floor sample in central excavation @ 6' BG.	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-OVER-111810	P-26	Possible overburden material	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
DUP111810	R-21	Field duplicate of sample CD-R21-1-FL	11/18/2010	SO	Mitkem	11/18/2010	11/24/2010	12/30/2010	
CD-P18-4-FL	P-18	Floor sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	11/19/2010	SO	Mitkem	11/19/2010	11/29/2010	12/30/2010	
CD-P19-3-FL	P-19	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to PCB failure.	11/19/2010	SO	Mitkem	11/19/2010	11/29/2010	12/30/2010	
CD-P20-2-FL	P-20	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	11/19/2010	SO	Mitkem	11/19/2010	11/29/2010	12/30/2010	
CD-O21-1-FL	O-21	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-O22-1-FL	O-22	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-N22-1-FL	N-22	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-S20-1-FL	S-20	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-P22-1-FL	P-22	Floor sample in central excavation @ 6' BG.	11/22/2010	SO	Mitkem	11/22/2010	11/30/2010	1/24/2010	
CD-P18-WP7' A	P-18	Sample taken under direction of USEPA/ACE directly under 36" water pipe	11/30/2010	SO	Mitkem	11/30/2010	12/6/2010	2/5/2011	
CD-P18-WP7' B	P-18	Sample taken under direction of USEPA/ACE directly under 36" water pipe	11/30/2010	SO	Mitkem	11/30/2010	12/6/2010	2/5/2011	
CD-N17-2-EW	N-17	Sidewall sample in central excavation @ 7' BG. Add'l 2' excavated due to PCB failure.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-2-SW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-2-WW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-1-EW	P-18	Sidewall sample in central excavation @ 12' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P18-1-NW	P-18	Sidewall sample in central excavation @ 12' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P19-1-NW	P-19	Sidewall sample in central excavation @ 9' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P19-1-SW	P-19	Sidewall sample in central excavation @ 9' BG.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-P20-3-FL	P-20	Floor sample in central excavation @ 9' BG. Add'l 1' excavated due to PCB failure.	12/1/2010	SO	Mitkem	12/1/2010	12/7/2010	2/5/2011	
CD-CLAYE-120210		Possible overburden clay material	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-CLAYW-120210		Possible overburden clay material	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-OVER-120210		Possible overburden material	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-O22-FL3.5'	O-22	Only.	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-1202PILEPM		USEPA sample FIO. PCB Only.	12/2/2010	SO	Mitkem	12/2/2010	12/8/2010	2/5/2011	
CD-WC-T21TP	T-21	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-U20TP	U-20	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-V22TP	V-22	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-U23TP	U-23	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-WC-U24TP	U-24	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/2/2010	SO	Mitkem	12/2/2010		12/15/2010	
CD-M22-1-FL	M-22	Floor sample in central excavation @ 6' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-M22-1-NW	M-22	Sidewall sample in central excavation @ 5' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-M23-1-FL	M-23	Floor sample in central excavation @ 6' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-M23-1-NW	M-23	Sidewall sample in central excavation @ 5' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-O23-1-FL	O-23	Floor sample in central excavation @ 6' BG.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-MAXY-BAG		Section of filter from baghouse with hardened soi clogging filters	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-MAXY-CALCINER		Soil (black crust) that built up along calciner walls.	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
DUP120610	O-23	Field duplicate of sample CD-O23-1-FL	12/6/2010	SO	Mitkem	12/6/2010	12/9/2010	2/19/2011	
CD-O21-WP7'	O-21	Sample taken under direction of USEPA/ACE directly under 36" water pipe	12/7/2010	SO	Mitkem	12/7/2010	12/13/2010	2/12/2011	
CD-1210PILEPM		USEPA sample FIO. Normal analysis minus PCB.	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P18-3-WW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P18-3-SW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P20-4-FL11'	P-20	Sample in central excavation @ 11' BG. Sample obtained by USEPA FIO. PCB only	12/10/2010	SO	Mitkem	12/10/2010	12/15/2010	2/12/2011	
CD-P20-1-SW	P-20	Sidewall sample in central excavation @ 12' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-P20-1-EW	P-20	Sidewall sample in central excavation @ 12' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-P20-1-NW	P-20	Sidewall sample in central excavation @ 12' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-U19-1-FL	U-19	Floor sample in central excavation @ 6' BG.	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
DUP121310	U-19	Field duplicate of sample CD-U19-1-FL	12/13/2010	SO	Mitkem	12/13/2010	12/16/2010	2/19/2011	
CD-WC-SCDEB-23-1		Waste characterization sample for off-site disposal of screened debris (pile #23)	12/13/2010	SO	Mitkem	12/13/2010		12/28/2010	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-SCDEB-23-2		Waste characterization sample for off-site disposal of screened debris (pile #23)	12/13/2010	SO	Mitkem	12/13/2010		12/28/2010	
CD-P18-4-WW	P-18	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	12/16/2010	SO	Mitkem	12/16/2010	12/21/2010	2/12/2011	
CD-P20-2-NW	P-20	Sidewall sample in central excavation @ 12' BG. Add'l 2' excavated due to PCB failure.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y26-6'	Y-26	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y26-10'	Y-26	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y26-14'	Y-26	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y27-6'	Y-27	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y27-10'	Y-27	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Y27-14'	Y-27	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z26-6'	Z-26	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z26-10'	Z-26	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z26-13'	Z-26	Test pit sampled to see if excavation is necessary, bedrock @ 13'	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z27-6'	Z-27	14' excavation area, shale encountered @ ~6' BG.	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z27-10'	Z-27	Test pit sampled to see if excavation is necessary	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-Z27-12'	Z-27	Test pit sampled to see if excavation is necessary, bedrock @ 12'	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
DUP121710	Z-26	Field duplicate of sample CD-Z26-6'	12/17/2010	SO	Mitkem	12/17/2010	12/23/2010	2/19/2011	
CD-WC-U21TP	U-21	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-U22TP	U-22	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-T22TP	T-22	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-T23TP	T-23	Test pits in capacitor disposal and high lead area, sample prior to offsite disposal	12/20/2010	SO	Mitkem	12/20/2010		1/4/2010	
CD-WC-SCDEB-24-1		Waste characterization sample for off-site disposal of screened debris (pile #24)	12/29/2010	SO	Mitkem	12/29/2010		1/11/2011	
CD-WC-SCDEB-24-2		Waste characterization sample for off-site disposal of screened debris (pile #24)	12/29/2010	SO	Mitkem	12/29/2010		1/11/2011	
CD-WC-CLAYW		Waste characterization sample for off-site disposal of clay pile (west side)	12/29/2010	SO	Mitkem	12/29/2010		1/11/2011	
CD-W31-1-FL	W-31	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-W32-1-FL	W-32	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-X31-1-FL	X-31	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-X32-1-FL	X-32	Floor sample in central excavation @ 8' BG.	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
DUP010311	W-31	Field duplicate of sample CD-W31-1-FL	1/3/2011	SO	Mitkem	1/3/2011	1/7/2011	2/19/2011	
CD-WC-SCDEB-25-1		Waste characterization sample for off-site disposal of screened debris (pile #25)	1/18/2011	SO	Mitkem	1/18/2011		2/1/2011	
CD-WC-SCDEB-25-2		Waste characterization sample for off-site disposal of screened debris (pile #25)	1/18/2011	SO	Mitkem	1/18/2011		2/1/2011	
CD-X24-8'	X-24	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X24-10'	X-24	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X24-13'	X-24	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X25-8'	X-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X25-10'	X-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X25-13'	X-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X26-8'	X-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X26-11'	X-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X26-13'	X-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X27-9'	X-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-X27-11'	X-27	Test pit sampled to see if excavation is necessary. Bedrock @ 12' BG	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W26-8'	W-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W26-11'	W-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W26-13'	W-26	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W27-8'	W-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W27-11'	W-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-W27-13'	W-27	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-ZY25-7'	Z&Y-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-ZY25-10'	Z&Y-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-ZY25-13'	Z&Y-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-AA25-7'	AA-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-AA25-10'	AA-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
CD-AA25-13'	AA-25	Test pit sampled to see if excavation is necessary	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
DUP012011	W-27	Field duplicate of sample CD-W27-8'	1/20/2011	SO	Mitkem	1/20/2011	1/27/2011	3/10/2011	
MXY-GRH-DIRT		Sample of feed soil, analyzed for TOC and BTU.	2/1/2011	SO	Mitkem	2/1/2011	2/8/2011	3/10/2011	
MXY-GRH-COAL		Sample of possible coal material, analyzed for TOC and BTU.	2/1/2011	ROCK	Mitkem	2/1/2011	2/8/2011	3/10/2011	
CD-WC-SCDEB-26-1		Waste characterization sample for off-site disposal of screened debris (pile #26)	2/3/2011	SO	Mitkem	2/3/2011		3/10/2011	
CD-WC-SCDEB-26-2		Waste characterization sample for off-site disposal of screened debris (pile #26)	2/3/2011	SO	Mitkem	2/3/2011		3/10/2011	
CD-WC-SCDEB-26-3		Waste characterization sample for off-site disposal of screened debris (pile #26)	2/3/2011	SO	Mitkem	2/3/2011		3/10/2011	
MXY-GRH-DIRT0204		Sample of feed soil, analyzed for TOC and BTU.	2/4/2011	SO	Mitkem	2/4/2011	2/8/2011	3/10/2011	
MXY-GRH-SLAG		Sample of slag material, analyzed for TOC and BTU.	2/4/2011	SLAG	Mitkem	2/4/2011	2/8/2011	3/10/2011	
CD-P27-1-FL	P-27	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-P28-1-FL	P-28	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-P29-1-FL	P-29	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-O28-1-FL	O-28	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-O29-1-FL	O-29	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-O30-1-FL	O-30	Floor sample in central excavation @ 6' BG.	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
DUP021011	P-27	Field duplicate of sample CD-P27-1-FL	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
DUP2021011	O-30	Field duplicate of sample CD-O30-1-FL	2/10/2011	SO	Mitkem	2/10/2011	2/15/2011	3/21/2011	
CD-P30-1-FL	P-30	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-O31-1-FL	O-31	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N28-1-FL	N-28	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N29-1-FL	N-29	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N30-1-FL	N-30	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-N31-1-FL	N-31	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-M29-1-FL	M-29	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-M30-1-FL	M-30	Floor sample in central excavation @ 6' BG.	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
DUP021411	P-30	Field duplicate of sample CD-P30-1-FL	2/14/2011	SO	Mitkem	2/14/2011	2/17/2011	3/21/2011	
CD-Z27-1-NW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-Z27-1-EW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-Z27-1-WW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-Z27-1-SW	Z-27	Sidewall sample in central excavation @ 11' BG.	2/15/2011	SO	Mitkem	2/15/2011	2/18/2011	3/21/2011	
CD-26-1		Post Excavation sample of debris pile #26 (shale pile), possible on-site backfill	2/17/2011	SO	Mitkem	2/17/2011	2/23/2011	3/30/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-26-2		Post Excavation sample of debris pile #26 (shale pile), possible on-site backfill	2/17/2011	SO	Mitkem	2/17/2011	2/23/2011	3/30/2011	
CD-26-3		Post Excavation sample of debris pile #26 (shale pile), possible on-site backfill	2/17/2011	SO	Mitkem	2/17/2011	2/23/2011	3/30/2011	
CD-WC-SCDEB-27-1		Waste characterization sample for off-site disposal of screened debris (pile #27)	2/17/2011	SO	Mitkem	2/17/2011		3/2/2011	
CD-WC-SCDEB-27-2		Waste characterization sample for off-site disposal of screened debris (pile #27)	2/17/2011	SO	Mitkem	2/17/2011		3/2/2011	
CD-WC-SCDEB-28		Waste characterization sample for off-site disposal of screened debris (pile #28)	2/17/2011	SO	Mitkem	2/17/2011		3/2/2011	
Samples taken after 36" water main break caused site-wide flood									
CD-AA25-1-SW	AA-25	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-AA26-1-SW	AA-26	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-AA27-1-SW	AA-27	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-AA252627-1FV-FL	AA-25, 26, 27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flood	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z26-1FV-FL	Z-26	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flood	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-NW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-EW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-WW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z27-1FV-SW	Z-27	Sidewall sample in central excavation @ 11' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z28-1-SW	Z-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z28-1-EW	Z-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Z28-1-FL	Z-28	Floor sample in central excavation @ 7' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Y27-1FV-FL	Y-27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flood	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Y28-1-FL	Y-28	Floor sample in central excavation @ 7' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-Y28-1-EW	Y-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-X28-1-EW	X-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-W28-1-EW	W-28	Sidewall sample in central excavation @ 6' BG.	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
DUP030411	X-28	Field duplicate of sample CD-X28-1-EW	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
DUP2030411	AA-27	Field duplicate of sample CD-AA27-1-SW	3/4/2011	SO	Mitkem	3/4/2011	3/8/2011	4/1/2011	
CD-M29-2-FL	M-29	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to VOC failure.	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-M30-2-FL	M-30	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to VOC failure.	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-N28-2-FL	N-28	Floor sample in central excavation @ 8' BG. Add'l 2' excavated due to VOC failure.	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-N29-1FV-FL	N-29	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-N30-1FV-FL	N-30	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-P27-1FV-FL	P-27	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-P28-1FV-FL	P-28	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-P29-1FV-FL	P-29	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-O28-1FV-FL	O-28	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-O29-1FV-FL	O-29	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-O30-1FV-FL	O-30	Floor sample in central excavation @ 6' BG. FV denotes a re-sample due to flood	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
DUP030811	N-30	Field duplicate of sample CD-N30-1FV-FL	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
DUP2030811	O-28	Field duplicate of sample CD-O28-1FV-FL	3/8/2011	SO	Mitkem	3/8/2011	3/11/2011	4/5/2011	
CD-W26-1-EW	W-26	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-W27-1FV-FL	W-27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flood	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-W28-1-FL	W-28	Floor sample in central excavation @ 7' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X26-1-EW	X-26	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X26-1-SW	X-26	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X27-1FV-FL	X-27	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flood	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-X28-1-FL	X-28	Floor sample in central excavation @ 7' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Y26-1FV-FL	Y-26	Floor sample in central excavation @ 7' BG. FV denotes a re-sample due to flood	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Y25-1-EW	Y-25	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Z25-1-EW	Z-25	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Z25-1-SW	Z-25	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-AA24-1-EW	AA-24	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-AA24-1-SW	AA-24	Sidewall sample in central excavation @ 13' BG.	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
DUP030911	X-28	Field duplicate of sample CD-X28-1-FL	3/9/2011	SO	Mitkem	3/9/2011	3/14/2011	4/5/2011	
CD-Q27-1-FL	Q-27	Floor sample in central excavation @ 6' BG.	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
CD-Q28-1-FL	Q-28	Floor sample in central excavation @ 6' BG.	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
CD-Q29-1-FL	Q-29	Floor sample in central excavation @ 6' BG.	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
DUP031111	Q-27	Field duplicate of sample CD-Q27-1-FL	3/11/2011	SO	Mitkem	3/11/2011	3/16/2011	4/5/2011	
CD-M29-3-FL	M-29	Floor sample in central excavation @ 10' BG. Add'l 2' excavated due to VOC failure.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-NW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-WW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-EW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-M29-1-SW	M-29	Sidewall sample in central excavation @ 9' BG.	3/14/2011	SO	Mitkem	3/14/2011	3/17/2011	4/11/2011	
CD-V24-1-FL	V-24	Floor sample in central excavation @ 8' BG.	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
CD-V25-1-FL	V-25	Floor sample in central excavation @ 8' BG.	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
CD-V26-1-FL	V-26	Floor sample in central excavation @ 8' BG.	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
DUP031511	V-25	Field duplicate of sample CD-V25-1-FL	3/15/2011	SO	Mitkem	3/15/2011	3/18/2011	4/11/2011	
CD-L26-1-NW	L-26	Sidewall sample in central excavation @ 5' BG.	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M26-0-3'	M-26	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M26-6'	M-26	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M27-0-3'	M-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-M27-6'	M-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-L27-0-3'	L-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-L27-6'	L-27	Test pit sampled to see if excavation is necessary	3/17/2011	SO	Mitkem	3/17/2011	3/22/2011	4/14/2011	
CD-LK28-0-3.5'	LK-28	Test pit sampled to see if excavation is necessary	3/18/2011	SO	Mitkem	3/18/2011	3/22/2011	4/14/2011	
CD-LK28-3.5'-8'	LK-28	Test pit sampled to see if excavation is necessary	3/18/2011	SO	Mitkem	3/18/2011	3/22/2011	4/14/2011	
CD-WC-M-V22	V-22	Waste characterization sample for off-site disposal post Maectite treatment	3/21/2011	SO	Mitkem	3/21/2011	3/25/2011	4/14/2011	
CD-WC-M-T21	T-21	Waste characterization sample for off-site disposal post Maectite treatment	3/21/2011	SO	Mitkem	3/21/2011	3/25/2011	4/14/2011	
CD-P24-0-3'	P-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P24-3'-8'	P-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P24-8'-14'	P-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-0-2'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-2'-5'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-P26-5'-11'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-P26-11'-14'	P-26	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-R24-0-3'	R-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-R24-3'-9'	R-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-R24-9'-14'	R-24	Test pit sampled to see if excavation is necessary	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
DUP032211	R-24	Field duplicate of sample CD-R24-0-3'	3/22/2011	SO	Mitkem	3/22/2011	3/25/2011	4/11/2011	
CD-WC-P24TP	P-24	Waste characterization sample for off-site disposal of grid	3/22/2011	SO	Mitkem	3/22/2011		4/5/2011	
CD-WC-P26TP	P-26	Waste characterization sample for off-site disposal of grid	3/22/2011	SO	Mitkem	3/22/2011		4/5/2011	
CD-WC-R24TP	R-24	Waste characterization sample for off-site disposal of grid	3/22/2011	SO	Mitkem	3/22/2011		4/5/2011	
CD-WC-M-U23	U-23	Waste characterization sample for off-site disposal post Maectite treatment	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-WC-M-T23	T-23	Waste characterization sample for off-site disposal post Maectite treatment	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N24-2'-4'	N-24	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N24-4'-6'	N-24	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N26-3'-4'	N-26	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-N26-4'-6'	N-26	Test pit sampled to see if excavation is necessary	3/23/2011	SO	Mitkem	3/23/2011	3/28/2011	4/22/2011	
CD-K29-0.5'-6'	K-29	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-K31-2'-6'	K-31	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-L34-3'-6'	L-34	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-M32-0.5'-6'	M-32	Test pit sampled to see if excavation is necessary	3/28/2011	SO	Mitkem	3/28/2011	3/31/2011	4/22/2011	
CD-WC-U27	U-27	Waste characterization sample for off-site disposal of CDA grid	3/28/2011	SO	Mitkem	3/28/2011		4/6/2011	
CD-WC-U28	U-28	Waste characterization sample for off-site disposal of CDA grid	3/28/2011	SO	Mitkem	3/28/2011		4/6/2011	
CD-WC-U29	U-29	Waste characterization sample for off-site disposal of CDA grid	3/28/2011	SO	Mitkem	3/28/2011		4/6/2011	
CD-WC-BlkScr-1		Waste characterization sample for off-site disposal of screened black soil	3/28/2011	SO	Mitkem	3/28/2011		4/5/2011	
CD-WC-BlkScr-2		Waste characterization sample for off-site disposal of screened black soil	3/28/2011	SO	Mitkem	3/28/2011		4/5/2011	
CD-WC-BlkDeb		Waste characterization sample for off-site disposal of screened black debris	3/28/2011	SO	Mitkem	3/28/2011		4/5/2011	
CD-SHALENORTH-0331		Sample of crushed shale prior to use as on-site backfill, shale from water main washout	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-SHALESOUTH-0331		Sample of crushed shale prior to use as on-site backfill, shale from water main washout	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q36-1-FL	Q-36	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q37-1-FL	Q-37	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q38-1-FL	Q-38	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q39-1-FL	Q-39	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-R39-1-FL	R-39	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-R40-1-FL	R-40	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-S39-1-FL	S-39	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-S40-1-FL	S-40	Floor sample in northeastern excavation @ 8' BG.	3/31/2011	SO	Mitkem	3/31/2011	4/5/2011	5/13/2011	
CD-Q40-1-FL	Q-40	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-Q41-1-FL	Q-41	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-R41-1-FL	R-41	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-S41-1-FL	S-41	Floor sample in northeastern excavation @ 8' BG.	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
DUP040411	Q-40	Field duplicate of sample CD-Q40-1-FL	4/4/2011	SO	Mitkem	4/4/2011	4/8/2011	5/13/2011	
CD-S39-2-FL	S-39	Floor sample in northeast excavation @ 8' BG. Add'l 2' excavated due to PCB failure.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S39-1-EW	S-39	Sidewall sample in northeastern excavation @ 7 BG.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S39-1-NW	S-39	Sidewall sample in northeastern excavation @ 7 BG.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S39-1-SW	S-39	Sidewall sample in northeastern excavation @ 7 BG.	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S24-5'-10'	S-24	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S24-10'-14'	S-24	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S26-5'-12'	S-26	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-S26-12'-14'	S-26	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-T25-5'-11'	T-25	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-T25-11'-14'	T-25	Test pit sampled to see if excavation is necessary	4/6/2011	SO	Mitkem	4/6/2011	4/11/2011	5/13/2011	
CD-XYZ-SHALE		Shale pile from X, Y, & Z grids, scraped after flood. Sampled prior to backfill	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-N25-1-FL	N-25	Floor sample in central excavation @ ~4' BG. QA sample CD-N25-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-O24-1-FL	O-24	Floor sample in central excavation @ ~4' BG. QA sample CD-O24-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-O25-1-FL	O-25	Floor sample in central excavation @ ~4' BG. QA sample CD-O25-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-P25-1-FL	P-25	Floor sample in central excavation @ ~4' BG. QA sample CD-P25-1-FLMP here.	4/7/2011	SO	Mitkem	4/7/2011	4/12/2011	5/13/2011	
CD-Q23-5'-10'	Q-23	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-Q23-10'-14'	Q-23	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-Q25-5'-10'	Q-25	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-Q25-10'-14'	Q-25	Test pit sampled to see if excavation is necessary	4/8/2011	SO	Mitkem	4/8/2011	4/13/2011	5/13/2011	
CD-M38-9'-14'	M-38	Test pit sampled to see if excavation is necessary	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-S41-1-EW	S-41	Sidewall sample along eastern perimeter @ 7' BG. QA sample CD-S41-1-EWMP here	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-R41-1-EW	R-41	Sidewall sample along eastern perimeter @ 7' BG. QA sample CD-R41-1-EWMP here	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-O39-1-FL	O-39	Floor sample in northeastern excavation @ 13' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-O40-1-FL	O-40	Floor sample in northeastern excavation @ 10' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-P39-1-FL	P-39	Floor sample in northeastern excavation @ 12' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-P40-1-FL	P-40	Floor sample in northeastern excavation @ 10' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-P41-1-FL	P-41	Floor sample in northeastern excavation @ 10' BG.	4/11/2011	SO	Mitkem	4/11/2011	4/14/2011	5/23/2011	
CD-Q41-1-EW	Q-41	Sidewall sample along eastern perimeter @ 7' BG. QA sample CD-Q41-1-EWMP here	4/12/2011	SO	Mitkem	4/12/2011	4/15/2011	5/23/2011	
CD-P41-1-NW	P-41	Sidewall sample along eastern perimeter @ 9' BG. QA sample CD-P41-1-NWMP here	4/12/2011	SO	Mitkem	4/12/2011	4/15/2011	5/23/2011	
CD-O40-1-NW	O-40	Sidewall sample along eastern perimeter @ 9' BG. QA sample CD-O40-1-NWMP here	4/12/2011	SO	Mitkem	4/12/2011	4/15/2011	5/23/2011	
CD-Q24-1-FL	Q-24	Floor sample in central excavation @ ~4' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N39-1-NW	N-39	Sidewall sample along northern perimeter @ 10 BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N39-1-FL	N-39	Floor sample in northeastern excavation @ 11' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N40-1-NW	N-40	Sidewall sample along northern perimeter @ 10 BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-N40-1-FL	N-40	Floor sample in northeastern excavation @ 11' BG.	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
DUP1041411	N-40	Field duplicate of sample CD-N40-1-FL	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
DUP2041411	N-39	Field duplicate of sample CD-N39-1-NW	4/14/2011	SO	Mitkem	4/14/2011	4/19/2011	5/23/2011	
CD-O37-10'-12'	O-37	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-O37-12'-14'	O-37	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-O38-10'-12'	O-38	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-O38-12'-14'	O-38	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-P37-SL	P-37	Sampled soil and stone directly under sanitary line	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-P37-9'-14'	P-37	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-P38-9'-14'	P-38	Test pit sampled to see if excavation is necessary	4/19/2011	SO	Mitkem	4/19/2011	4/25/2011	5/23/2011	
CD-N37-10'-14'	N-37	Test pit sampled to see if excavation is necessary	4/26/2011	SO	Mitkem	4/26/2011	4/29/2011	5/23/2011	
CD-N38-10'-14'	N-38	Test pit sampled to see if excavation is necessary	4/26/2011	SO	Mitkem	4/26/2011	4/29/2011	5/23/2011	
CD-P31-6'	P-31	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-P32-8'	P-32	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-Q30-7'	Q-30	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-Q31-7'	Q-31	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-WC-Q32-0'-4'	Q-32	Waste characterization sample for off-site disposal of gray ash filled with capacitors	4/29/2011	SO	Mitkem	4/29/2011		5/12/2011	
CD-Q32-4'-6'	Q-32	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R27-6'-13'	R-27	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R27-13'-14'	R-27	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R29-7'	R-29	Sample obtained beneath black ash that still needs to be excavated and screened	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-WC-R3132-0'-4'	R-31 32	Waste characterization sample for off-site disposal of gray ash filled with capacitors	4/29/2011	SO	Mitkem	4/29/2011		6/6/2011	
CD-R3132-4'-6'	R-31 32	Test pit sampled to see if excavation is necessary	4/29/2011	SO	Mitkem	4/29/2011	5/4/2011	6/6/2011	
CD-R25-3'-12'	R-25	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-R25-12'-14'	R-25	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-N27-3'-6'	N-27	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-O26-3'-6'	O-26	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-O27-3'-6'	O-27	Test pit sampled to see if excavation is necessary	5/2/2011	SO	Mitkem	5/2/2011	5/5/2011	6/6/2011	
CD-WC-BlkScr-3		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-WC-BlkScr-4		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-WC-BlkScr-5		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-WC-BlkScr-6		Waste characterization sample for off-site disposal of screened black ash	5/4/2011	SO	Mitkem	5/4/2011		6/6/2011	
CD-R23-5'-11'	R-23	Test pit sampled to see if excavation is necessary	5/5/2011	SO	Mitkem	5/5/2011	5/10/2011	6/6/2011	
CD-R23-11'-14'	R-23	Test pit sampled to see if excavation is necessary	5/5/2011	SO	Mitkem	5/5/2011	5/10/2011	6/6/2011	
CD-WC-SCDEB-29		Waste characterization sample for off-site disposal of screened debris (pile #29)	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S22-7'-14'	S-22	In-situ waste characterization sample for off-site disposal of grid S-22	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S23-7'-14'	S-23	In-situ waste characterization sample for off-site disposal of grid S-23	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S27-7'-14'	S-27	In-situ waste characterization sample for off-site disposal of grid S-27	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-S28-7'-14'	S-28	In-situ waste characterization sample for off-site disposal of grid S-28	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-T27-7'-14'	T-27	In-situ waste characterization sample for off-site disposal of grid T-27	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-T28-0'-7'	T-28	In-situ waste characterization sample for off-site disposal of grid T-28	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-WC-T28-7'-14'	T-28	In-situ waste characterization sample for off-site disposal of grid T-28	5/5/2011	SO	Mitkem	5/5/2011		5/16/2011	
CD-BF-MX-5	Off-site	Sample taken off-site (@ Weldon Quarry) of DGA backfill material	5/9/2011	SO	Mitkem	5/9/2011		6/29/2011	
CD-P15-3-WW	P-15	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure.	5/9/2011	SO	Mitkem	5/9/2011	5/12/2011	6/10/2011	
CD-P37-1-FL	P-37	Floor sample in northeastern excavation @ 14' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P37-1-NW	P-37	Sidewall sample in northeastern excavation @ 13 BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P37-1-WW	P-37	Sidewall sample in northeastern excavation @ 13 BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P37-1-SW	P-37	Sidewall sample in northeastern excavation @ 13 BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P33-1-FL	P-33	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P34-1-FL	P-34	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-P35-1-FL	P-35	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-O34-1-FL	O-34	Floor sample in northeastern excavation @ 10' BG.	5/10/2011	SO	Mitkem	5/10/2011	5/17/2011	6/10/2011	
CD-N23-1-FL	N-23	Floor sample in central excavation @ 3' BG.	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-N34-12'-14'	N-34	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-N35-12'-14'	N-35	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-N36-12'-14'	N-36	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-O35-11'-14'	O-35	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-O36-11'-14'	O-36	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-P36-10'-14'	P-36	Test pit sampled to see if excavation is necessary	5/11/2011	SO	Mitkem	5/11/2011	5/16/2011	6/6/2011	
CD-P20-3-NW	P-20	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated due to PCB failure.	5/12/2011	SO	Mitkem	5/12/2011	5/17/2011	6/17/2011	
CD-P15-4-WW	P-15	Sidewall sample in central excavation @ 5' BG. Add'l 2' excavated due to PCB failure.	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-H2829-0-6'	H-2829	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-I28-0-6'	I-28	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-I29-0-6'	I-29	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-J28-0-5'	J-28	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-J28-5-6'	J-28	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-J29-0-6'	J-29	Test pit sampled to see if excavation is necessary	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
DUP051911	P-15	Field duplicate of sample CD-P15-4-WW	5/19/2011	SO	Mitkem	5/19/2011	5/24/2011	6/17/2011	
CD-K30-2-6'	K-30	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-L29-4-6'	L-29	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-L30-10'	L-30	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-L32-9'	L-32	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-LM33-3-6'	L/M-33	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-N32-4'-6'	N-32	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-N33-3'-6'	N-33	Test pit sampled to see if excavation is necessary	5/20/2011	SO	Mitkem	5/20/2011	5/25/2011	6/10/2011	
CD-P20-4-NW	P-20	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated due to PCB failure.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-P23-1-FL	P-23	Floor sample in central excavation @ 4' BG.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-Q22-1-FL	Q-22	Floor sample in central excavation @ 4' BG.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-R22-1-FL	R-22	Floor sample in central excavation @ 4' BG.	5/23/2011	SO	Mitkem	5/23/2011	5/26/2011	6/17/2011	
CD-N34-1-NW	N-34	Sidewall sample in northeastern excavation @ 13 BG. QA sample CD-N34-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N35-1-NW	N-35	Sidewall sample in northeastern excavation @ 13 BG. QA sample CD-N35-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N36-1-NW	N-36	Sidewall sample in northeastern excavation @ 13 BG. QA sample CD-N36-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-NW	N-37	Sidewall sample in northeastern excavation @ 13 BG. QA sample CD-N37-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-NW	M-38	Sidewall sample in northeastern excavation @ 13 BG. QA sample CD-M38-1-NWMP	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-WW	N-37	Sidewall sample in northeastern excavation @ 13 BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-EW	N-37	Sidewall sample in northeastern excavation @ 13 BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-N37-1-SW	N-37	Sidewall sample in northeastern excavation @ 13 BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-WW	M-38	Sidewall sample in northeastern excavation @ 13 BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-EW	M-38	Sidewall sample in northeastern excavation @ 13 BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M38-1-SW	M-38	Sidewall sample in northeastern excavation @ 13 BG.	5/24/2011	SO	Mitkem	5/24/2011	5/27/2011	6/27/2011	
CD-M24-1-FL	M-24	Floor sample in central excavation @ 3' BG. QA sample CD-M24-1-FLMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M24-1-NW	M-24	Sidewall sample in central excavation @ 2' BG. QA sample CD-M24-1-NWMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M25-1-FL	M-25	Floor sample in central excavation @ 3' BG. QA sample CD-M25-1-FLMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M25-1-NW	M-25	Sidewall sample in central excavation @ 2' BG. QA sample CD-M25-1-NWMP	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-M25-WP	M-25	USEPA directed FIO sample directly under 36" water main	5/25/2011	SO	Mitkem	5/25/2011	5/31/2011	7/7/2011	
CD-WC-M-2-V22	V-22	Waste characterization sample for off-site disposal post Quick Lime treatment	5/26/2011	SO	Mitkem	5/26/2011		7/7/2011	
CD-WC-M-2-U23	U-23	Waste characterization sample for off-site disposal post Quick Lime treatment	5/26/2011	SO	Mitkem	5/26/2011		7/7/2011	
CD-M38-2-WW	M-38	Sidewall sample in east excavation @ 13' BG. Add'l 2' excavated due to PCB failure.	5/31/2011	SO	Mitkem	5/31/2011	6/3/2011	7/7/2011	
CD-L31-8'	L-31	Test pit sampled to see if excavation is necessary	5/31/2011	SO	Mitkem	5/31/2011	6/3/2011	7/7/2011	
CD-WC-L30	L-30	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-WC-L31	L-31	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-WC-L32	L-32	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-WC-M34	M-34	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7'-10' BG	5/31/2011	SO	Mitkem	5/31/2011		6/13/2011	
CD-Q3334-1-FL	Q-33 &34	Floor sample in central excavation @ 10' BG. QA sample CD-Q3334-1-FLMP	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-Q35-1-FL	Q-35	Floor sample in central excavation @ 10' BG. QA sample CD-Q35-1-FLMP	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-BinBlock-1		Sampled on-site bin blocks to determine level of contamination	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-BinBlock-2		Sampled on-site bin blocks to determine level of contamination	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-BinBlock-3		Sampled on-site bin blocks to determine level of contamination	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-I17-0'-1'	I-17	Sampled DGA material in LTTD Greenhouse footprint (NW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-I20-0'-1'	I-20	Sampled DGA material in LTTD Greenhouse footprint (NE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J17-0'-1'	J-17	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J20-0'-1'	J-20	Sampled DGA material in LTTD Greenhouse footprint (SE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J12-0'-1'	J-12	Sampled DGA material in LTTD WWTP footprint (NW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-J13-0'-1'	J-13	Sampled DGA material in LTTD WWTP footprint (NE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-K12-0'-1'	K-12	Sampled DGA material in LTTD WWTP footprint (SW corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-K13-0'-1'	K-13	Sampled DGA material in LTTD WWTP footprint (SE corner)	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
DUP060211	I-20	Field duplicate of sample CD-I20-0'-1'	6/2/2011	SO	Mitkem	6/2/2011	6/7/2011	7/7/2011	
CD-WC-S22-0'-7'	S-22	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7' BG	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-S23-0'-7'	S-23	In-situ sample of black ash material prior to off-site disposal, depth range 0'-7' BG	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SOIL-1		Waste characterization sample for off-site disposal of soil (pile #1)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-30		Waste characterization sample for off-site disposal of screened debris (pile #30)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-31		Waste characterization sample for off-site disposal of screened debris (pile #31)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-32		Waste characterization sample for off-site disposal of screened debris (pile #32)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-33		Waste characterization sample for off-site disposal of screened debris (pile #33)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-WC-SCDEB-34		Waste characterization sample for off-site disposal of screened debris (pile #34)	6/7/2011	SO	Mitkem	6/7/2011		6/15/2011	
CD-U21-PCB	U-21	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-U22-PCB	U-22	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-T22-PCB	T-22	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-T23-PCB	T-23	PCB only sample prior to off-site disposal	6/13/2011	SO	Mitkem	6/13/2011	6/14/2011	7/7/2011	
CD-WC-Blk-7		Waste characterization sample for off-site disposal of black material (pile #7)	6/13/2011	SO	Mitkem	6/13/2011		7/8/2011	
CD-WC-Blk-8		Waste characterization sample for off-site disposal of black material (pile #8)	6/13/2011	SO	Mitkem	6/13/2011		7/9/2011	
CD-WC-Blk-9		Waste characterization sample for off-site disposal of black material (pile #9)	6/13/2011	SO	Mitkem	6/13/2011		7/10/2011	
CD-J13-1-EW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-J13-1-NW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-J13-1-SW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-J13-1-WW	J-13	Sampled DGA material in LTTD Greenhouse footprint (SW corner)	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-Q26-4'	Q-26	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R26-5'-10'	R-26	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R26-10'-14'	R-26	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R28-8'-12'	R-28	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-R28-12'-14'	R-28	Test pit sampled to see if excavation is necessary	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
DUP061511	Q-26	Field duplicate of sample CD-Q26-4'	6/15/2011	SO	Mitkem	6/15/2011	6/20/2011	7/8/2011	
CD-WC-SCDEB-35		Waste characterization sample for off-site disposal of screened debris (pile #35)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-10		Waste characterization sample for off-site disposal of black material (pile #10)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-BLK-11		Waste characterization sample for off-site disposal of black material (pile #11)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-12		Waste characterization sample for off-site disposal of black material (pile #12)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-13		Waste characterization sample for off-site disposal of black material (pile #13)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-BLK-14		Waste characterization sample for off-site disposal of black material (pile #14)	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-WC-R28-0'-8'	R-28	In-situ sample of black ash material prior to off-site disposal, depth range 0'-8' BG	6/15/2011	SO	Mitkem	6/15/2011		6/22/2011	
CD-T23-8'-14'	T-23	Test pit sampled to see if excavation is necessary	6/22/2011	SO	Mitkem	6/22/2011	6/27/2011	7/21/2011	
CD-U24-7'-14'	U-24	Test pit sampled to see if excavation is necessary	6/22/2011	SO	Mitkem	6/22/2011	6/27/2011	7/21/2011	
CD-V22-8'-14'	V-22	Test pit sampled to see if excavation is necessary	6/22/2011	SO	Mitkem	6/22/2011	6/27/2011	7/21/2011	
CD-U21-7'-14'	U-21	Test pit sampled to see if excavation is necessary	6/27/2011	SO	Mitkem	6/27/2011	7/1/2011	7/21/2011	
CD-T21-7'-14'	T-21	Test pit sampled to see if excavation is necessary	6/27/2011	SO	Mitkem	6/27/2011	7/1/2011	7/21/2011	
CD-WC-SCSOIL-36		Waste characterization sample for off-site disposal of screened soil (pile #36)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-37		Waste characterization sample for off-site disposal of screened soil (pile #37)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-38		Waste characterization sample for off-site disposal of screened soil (pile #38)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-39		Waste characterization sample for off-site disposal of screened soil (pile #39)	6/27/2011	SO	Mitkem	6/27/2011		7/7/2011	
CD-WC-SCSOIL-40		Waste characterization sample for off-site disposal of screened soil (pile #40)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-41		Waste characterization sample for off-site disposal of screened soil (pile #41)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-42		Waste characterization sample for off-site disposal of screened soil (pile #42)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-43		Waste characterization sample for off-site disposal of screened soil (pile #43)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-44		Waste characterization sample for off-site disposal of screened soil (pile #44)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-SCSOIL-45		Waste characterization sample for off-site disposal of screened soil (pile #45)	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-S24-6'-14'	S-24	In-situ sample of soils prior to off-site disposal depth range 6'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-S25-6'-14'	S-25	In-situ sample of soils prior to off-site disposal depth range 6'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-S26-6'-14'	S-26	In-situ sample of soils prior to off-site disposal depth range 6'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T23-8'-14'	T-23	In-situ sample of soils prior to off-site disposal depth range 8'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T24-7'-14'	T-24	In-situ sample of soils prior to off-site disposal depth range 7'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T25-7'-14'	T-25	In-situ sample of soils prior to off-site disposal depth range 7'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-T26-7'-14'	T-26	In-situ sample of soils prior to off-site disposal depth range 7'-14' BG	6/28/2011	SO	Mitkem	6/28/2011		7/13/2011	
CD-WC-ASPH-11		Waste characterization sample for off-site disposal of asphalt (pile #11)	6/30/2011	SO	Mitkem	6/30/2011		7/13/2011	
CD-WC-ASPH-12		Waste characterization sample for off-site disposal of asphalt (pile #12)	6/30/2011	SO	Mitkem	6/30/2011		7/13/2011	
CD-WC-T21-9'-14'	T-21	In-situ sample of soils prior to off-site disposal depth range 9'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-T22-8'-14'	T-22	In-situ sample of soils prior to off-site disposal depth range 8'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U21-9'-14'	U-21	In-situ sample of soils prior to off-site disposal depth range 9'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U22-8'-14'	U-22	In-situ sample of soils prior to off-site disposal depth range 8'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U23-8'-14'	U-23	In-situ sample of soils prior to off-site disposal depth range 8'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U24-6'-14'	U-24	In-situ sample of soils prior to off-site disposal depth range 6'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U25-6'-14'	U-25	In-situ sample of soils prior to off-site disposal depth range 6'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-U26-10'-14'	U-26	In-situ sample of soils prior to off-site disposal depth range 10'-14' BG	7/6/2011	SO	Mitkem	7/6/2011		7/19/2011	
CD-WC-V20-8'-14'	V-20	In-situ sample of soils prior to off-site disposal depth range 8'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V21-8'-14'	V-21	In-situ sample of soils prior to off-site disposal depth range 8'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V23-9'-14'	V-23	In-situ sample of soils prior to off-site disposal depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V27-9'-14'	V-27	In-situ sample of soils prior to off-site disposal depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V28-9'-14'	V-28	In-situ sample of soils prior to off-site disposal depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-WC-V29-9'-14'	V-29	In-situ sample of soils prior to off-site disposal depth range 9'-14' BG	7/7/2011	SO	Mitkem	7/7/2011		7/20/2011	
CD-T20-1-FL	T-20	Floor sample in central excavation @ 6' BG.	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
CD-U20-1-FL	U-20	Floor sample in central excavation @ 6' BG.	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
CD-S21-1-FL	S-21	Floor sample in central excavation @ 6' BG.	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
DUP071111	U-20	Field duplicate of sample CD-U20-1-FL	7/11/2011	SO	Mitkem	7/11/2011	7/14/2011	8/9/2011	
CD-H2829-1-FL	H-2829	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-J29-1-FL	J-29	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-K29-1-FL	K-29	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-K3031-1-FL	K-3031	Floor sample in northern excavation @ 6' BG.	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
DUP071211	K-29	Field duplicate of sample CD-K29-1-FL	7/12/2011	SO	Mitkem	7/12/2011	7/15/2011	8/9/2011	
CD-WC-H2829-0'-6'	H-2829	In-situ sample of soils prior to off-site disposal depth range 0'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-J28-0'-5'	J-28	In-situ sample of soils prior to off-site disposal depth range 0'-5' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-J29-0'-6'	J-29	In-situ sample of soils prior to off-site disposal depth range 0'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-K29-0.5'-6'	K-29	In-situ sample of soils prior to off-site disposal depth range 0.5'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-K3031-2'-6'	K-3031	In-situ sample of soils prior to off-site disposal depth range 2'-6' BG	7/12/2011	SO	Mitkem	7/12/2011		7/25/2011	
CD-WC-SCSOIL-46		Waste characterization sample for off-site disposal of screened soil (pile #46)	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-WC-SCSOIL-47		Waste characterization sample for off-site disposal of screened soil (pile #47)	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-WC-SCSOIL-48		Waste characterization sample for off-site disposal of screened soil (pile #48)	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-WC-SCSOIL-49		Waste characterization sample for off-site disposal of screened soil (pile #49)	7/14/2011	SO	Mitkem	7/14/2011		7/22/2011	
CD-BF-MX-6		Sample taken off-site (@ Weldon Quarry) of on-site DGA backfill material	7/19/2011	SO	Mitkem	7/19/2011		8/18/2011	
CD-P14-1-FL	P-14	Floor sample in central excavation @ 4' BG. Taken after P-15 WW sample failures	7/27/2011	SO	Mitkem	7/27/2011	8/1/2011	8/25/2011	
CD-WC-ASPH-13		Waste characterization sample for off-site disposal of asphalt (pile #13)	7/27/2011	SO	Mitkem	7/27/2011		8/10/2011	
CD-B5-1-FL	B-5	Floor sample in northwest excavation @ 2' BG. QA Sample CD-B5-1-FLMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-NW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-NWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-B5-1-EW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-EWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-SW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-SWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B5-1-WW	B-5	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B5-1-WWMP here.	8/3/2011	SO	Mitkem	8/3/2011	8/8/2011	8/29/2011	
CD-B9-1-FL	B-9	Floor sample in northwest excavation @ 2' BG. QA Sample CD-B9-1-FLMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-NW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-NWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-EW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-EWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-SW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-SWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-B9-1-WW	B-9	Sidewall sample in northwest excavation @ 1' BG. QA Sample CD-B9-1-WWMP here.	8/4/2011	SO	Mitkem	8/4/2011	8/9/2011	9/6/2011	
CD-WC-SCSOIL-50		Waste characterization sample for off-site disposal of screened soil (pile #50)	8/10/2011	SO	Mitkem	8/10/2011		8/24/2011	
CD-A4-1-FL	A-4	Floor sample in northwest excavation @ 0' BG.	8/11/2011	SO	Mitkem	8/11/2011	8/16/2011	9/16/2011	
CD-A5-ASPH	A-5	Asphalt sample taken from A-5 grid, analyzed for PCB only	8/16/2011	SO	Mitkem	8/16/2011	8/19/2011	9/12/2011	
CD-A5-1-FL	A-5	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A6-1-FL	A-6	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A7-1-FL	A-7	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A8-1-FL	A-8	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-A9-1-FL	A-9	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-B6-1-FL	B-6	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-B7-1-FL	B-7	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-B8-1-FL	B-8	Floor sample in northwest excavation @ 0' BG.	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
DUP081711	A-6	Field duplicate of sample CD-A6-1-FL	8/17/2011	SO	Mitkem	8/17/2011	8/22/2011	9/16/2011	
CD-WC-SCSOIL-51		Waste characterization sample for off-site disposal of screened soil (pile #51)	8/18/2011	SO	Mitkem	8/18/2011		8/31/2011	
CD-WC-SCSOIL-52		Waste characterization sample for off-site disposal of screened soil (pile #52)	8/18/2011	SO	Mitkem	8/18/2011		8/31/2011	
CD-WC-SCSOIL-53		Waste characterization sample for off-site disposal of screened soil (pile #53)	8/19/2011	SO	Mitkem	8/19/2011		8/31/2011	
CD-WC-SCSOIL-54		Waste characterization sample for off-site disposal of screened soil (pile #54)	8/19/2011	SO	Mitkem	8/19/2011		8/31/2011	
CD-A13-0-6"RR	A-13	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A13-18-24"RR	A-13	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A14-0-6"RR	A-14	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A15-0-6"RR	A-15	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A15-18-24"RR	A-15	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A16-0-6"RR	A-16	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A17-0-6"RR	A-17	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-A18-0-6"RR	A-18	Pre-excavation sample along conrail property	8/24/2011	SO	Mitkem	8/24/2011	8/29/2011	9/29/2011	
CD-ASPH-14PCB		PCB only sample prior to off-site disposal	8/25/2011	SO	Mitkem	8/25/2011	8/30/2011	9/12/2011	
CD-ASPH-15PCB		PCB only sample prior to off-site disposal	8/25/2011	SO	Mitkem	8/25/2011	8/30/2011	9/12/2011	
CD-WC-SCSOIL-55		Waste characterization sample for off-site disposal of screened soil (pile #55)	8/31/2011	SO	Mitkem	8/31/2011		9/8/2011	
CD-WC-SCSOIL-56		Waste characterization sample for off-site disposal of screened soil (pile #56)	8/31/2011	SO	Mitkem	8/31/2011		9/8/2011	
CD-ASPH-16PCB		PCB only sample prior to off-site disposal	8/31/2011	SO	Mitkem	8/31/2011	9/6/2011	9/29/2011	
CD-LTTD-DGA		Sample of DGA pile from LTTD footprint prior to use as on-site backfill	9/1/2011	SO	Mitkem	9/1/2011	9/7/2011	10/18/2011	
CD-LTTD-RED		Sample of shale/soile pile from LTTD footprint prio to use as on-site backfill	9/1/2011	SO	Mitkem	9/1/2011	9/7/2011	10/18/2011	
CD-ASPH-17PCB		PCB only sample prior to off-site disposal	9/8/2011	SO	Mitkem	9/8/2011	9/12/2011	9/29/2011	
CD-WC-ASPH-16		Waste characterization sample for off-site disposal of asphalt (pile #16)	9/13/2011	SO	Mitkem	9/13/2011		9/23/2011	
CD-B19-0-6"RR	B-19	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-B20-0-6"RR	B-20	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-B21-0-6"RR	B-21	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-C22-0-6"RR	C-22	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-C23-0-6"RR	C-23	Pre-excavation sample along conrail property	9/13/2011	SO	Mitkem	9/13/2011	9/16/2011	10/18/2011	
CD-WC-ASPH-15		Waste characterization sample for off-site disposal of asphalt (pile #15)	9/15/2011	SO	Mitkem	9/15/2011		9/26/2011	
CD-WC-ASPH-17		Waste characterization sample for off-site disposal of asphalt (pile #17)	9/15/2011	SO	Mitkem	9/15/2011		9/26/2011	
CD-bb3W-0-6"RR	bb-3W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-bb4W-0-6"RR	bb-4W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-ba4W-0-6"RR	ba-4W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-ba4W-18"-24"RR	ba-4W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-bb5W-0-6"RR	bb-5W	Pre-excavation sample along conrail property	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-2-FL	P-14	Floor sample in central excavation @ 6' BG. Add'l 2 excavated for PCB failure	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-1-SW	P-14	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-1-NW	P-14	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P14-1-WW	P-14	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P15-1-FL	P-15	Floor sample in central excavation @ 6' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P15-1-SW	P-15	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-P15-1-NW	P-15	Sidewall sample in central excavation @ 5' BG.	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
DUP091511	P-14	Field duplicate of sample CD-P14-1-NW	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
DUP2091511	P-15	Field duplicate of sample CD-P15-1-NW	9/15/2011	SO	Mitkem	9/15/2011	9/20/2011	10/18/2011	
CD-WC-ASPH-14		Waste characterization sample for off-site disposal of asphalt (pile #14)	9/20/2011	SO	Mitkem	9/20/2011		9/28/2011	
CD-WC-SCSOIL-57		Waste characterization sample for off-site disposal of soil (pile #57)	9/20/2011	SO	Mitkem	9/20/2011		9/28/2011	
CD-WC-M-R28	R-28	TCLP Metals only sample post maectite treatment	9/21/2011	SO	Mitkem	9/21/2011	9/27/2011	11/9/2011	
CD-WC-M-S22	S-22	TCLP Metals only sample post maectite treatment	9/26/2011	SO	Mitkem	9/26/2011	9/29/2011	11/9/2011	
CD-WC-M-R3132	R-31 32	TCLP Metals only sample post maectite treatment	9/26/2011	SO	Mitkem	9/26/2011	9/29/2011	11/9/2011	
CD-WC-M-Q32	Q-32	TCLP Metals only sample post maectite treatment	9/26/2011	SO	Mitkem	9/26/2011	9/29/2011	11/9/2011	
CD-U20-2-FL	U-20	Floor sample in central excavation @ 8' BG. Add'l 2 excavated for PCB failure	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
CD-U20-1-WW	U-20	Sidewall sample in central excavation @ 7' BG.	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
CD-U20-1-NW	U-20	Sidewall sample in central excavation @ 7' BG.	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
DUP092711	U-20	Field duplicate of sample CD-U20-1-WW	9/27/2011	SO	Mitkem	9/27/2011	9/30/2011	11/9/2011	
CD-W20-3-WW15'	W-20	Sidewall sample in central excavation @ 15' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-V20-1-WW	V-20	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-T21-1-WW	T-21	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-S22-1-WW	S-22	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-S22-1-NW	S-22	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-S23-1-NW	S-23	Sidewall sample in central excavation @ ~14' BG.	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
DUP092811	T-21	Field duplicate of sample CD-T21-1-WW	9/28/2011	SO	Mitkem	9/28/2011	10/3/2011	11/9/2011	
CD-BC3-1-FL	B/C-3	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C4-1-FL	C-4	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-C5-1-FL	C-5	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C6-1-FL	C-6	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C7-1-FL	C-7	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-B4-1-FL	B-4	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-D456-1-FL	D-4,5,6	Floor sample in northwestern excavation @ 0' BG.	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
DUP100511	C-4	Field duplicate of sample CD-C4-1-FL	10/5/2011	SO	Mitkem	10/5/2011	10/7/2011	11/9/2011	
CD-C89-1-FL	C-8,9	Floor sample in northwestern excavation @ 0' BG.	10/6/2011	SO	Mitkem	10/6/2011	10/11/2011	11/9/2011	
CD-A7-2-FL	A-7	Floor sample in northwestern excavation @ 2' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-A7-1-WW	A-7	Sidewall sample in northwestern excavation @ 1 BG.	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-A7-1-EW	A-7	Sidewall sample in northwestern excavation @ 1 BG.	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-B9-2-FL	B-9	Floor sample in northwestern excavation @ 2' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-S23-2-NW	S-23	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-T21-2-WW	T-21	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/10/2011	SO	Mitkem	10/10/2011	10/13/2011	12/7/2011	
CD-P20-5-NW	P-20	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/11/2011	SO	Mitkem	10/11/2011	10/14/2011	12/7/2011	
CD-WC-M-2-R3132	R-31 32	TCLP Metals only sample post maectite re treatment	10/11/2011	SO	Mitkem	10/11/2011	10/14/2011	12/7/2011	
CD-WC-M-2-Q32	Q-32	TCLP Metals only sample post maectite re treatment	10/11/2011	SO	Mitkem	10/11/2011	10/14/2011	12/7/2011	
CD-WC-SCSOIL-58		Waste characterization sample for off-site disposal of soil (pile #58)	10/13/2011	SO	Mitkem	10/13/2011		10/21/2011	
CD-WC-SCSOIL-59		Waste characterization sample for off-site disposal of soil (pile #59)	10/13/2011	SO	Mitkem	10/13/2011		10/21/2011	
CD-T21-3-WW	T-21	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-R25-1-NW	R-25	Sidewall sample in central excavation @ 13' BG.	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-R25-1-EW	R-25	Sidewall sample in central excavation @ 13' BG.	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-H2829-2-FL	H-2829	Floor sample in northwestern excavation @ 8' BG. Add'l 2' excavated for PCB failure	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-J29-2-FL	J-29	Floor sample in northwestern excavation @ 8' BG. Add'l 2' excavated for PCB failure	10/14/2011	SO	Mitkem	10/14/2011	10/19/2011	12/7/2011	
CD-N26-1-FL	N-26	Floor sample in central excavation @ 8' BG. QA sample CD-N26-1-FLMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N26-1-NW	N-26	Floor sample in central excavation @ 7' BG. QA sample CD-N26-1-NWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N26-1-SW	N-26	Floor sample in central excavation @ 7' BG. QA sample CD-N26-1-SWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N26-1-WW	N-26	Floor sample in central excavation @ 7' BG. QA sample CD-N26-1-WWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-FL	N-27	Floor sample in central excavation @ 8' BG. QA sample CD-N27-1-FLMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-NW	N-27	Floor sample in central excavation @ 7' BG. QA sample CD-N27-1-NWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-SW	N-27	Floor sample in central excavation @ 7' BG. QA sample CD-N27-1-SWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-N27-1-EW	N-27	Floor sample in central excavation @ 7' BG. QA sample CD-N27-1-EWMP here	10/18/2011	SO	Mitkem	10/18/2011	10/21/2011	12/7/2011	
CD-T21-4-WW	T-21	Sidewall sample in central excavation @ 13' BG. Add'l 2' excavated for PCB failure	10/20/2011	SO	Mitkem	10/20/2011	10/25/2011	12/7/2011	
CD-M28-1-FL	M-28	Floor sample in central excavation @ ~7' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-K29-2-FL	K-29	Floor sample in central excavation @ 8' BG. Add'l 2 excavated fur to VOC failure.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-K3031-2-FL	K-30 31	Floor sample in central excavation @ 8' BG. Add'l 2 excavated fur to VOC failure.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-LM34-1-FL	L/M-34	Floor sample in central excavation @ 6' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-LM34-1-EW	L/M-34	Sidewall sample in central excavation @ 5' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-L27-1-WW	L-27	Sidewall sample in central excavation @ 3' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-JK27-1-FL	J/K-27	Floor sample in central excavation @ 6' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-K27-1-WW	K-27	Sidewall sample in central excavation @ 5' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-J27-1-WW	J-27	Sidewall sample in central excavation @ 5' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-I28-1-WW	I-28	Sidewall sample in central excavation @ 4' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-H28-1-WW	H-28	Sidewall sample in central excavation @ 7' BG.	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
DUP102511	K-30 31	Field duplicate of sample CD-K3031-2-FL	10/25/2011	SO	Mitkem	10/25/2011	11/1/2011	12/7/2011	
CD-WC-Blk-15		Waste characterization sample for off-site disposal of black material (pile #15)	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-Blk-16		Waste characterization sample for off-site disposal of black material (pile #16)	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-Blk-17		Waste characterization sample for off-site disposal of black material (pile #17)	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-Blk-18		Waste characterization sample for off-site disposal of black material (pile #18)	10/25/2011	SO	Mitkem	10/25/2011		11/4/2011	
CD-WC-SCSOIL-60		Waste characterization sample for off-site disposal of soil/shale (pile #60)	10/26/2011	SO	Mitkem	10/26/2011		11/4/2011	
CD-WC-SCSOIL-61		Waste characterization sample for off-site disposal of soil/shale (pile #61)	10/26/2011	SO	Mitkem	10/26/2011		11/4/2011	
CD-WC-ASPH-18		Waste characterization sample for off-site disposal of asphalt (pile #18)	10/26/2011	SO	Mitkem	10/26/2011		11/4/2011	
CD-BF-MX-7		Sample taken off-site (@ Weldon Quarry) of DGA backfill material	11/1/2011	SO	Mitkem	11/1/2011		12/22/2011	
CD-SA-MX-7		Sample taken off-site (@ Clayton Quarry) of Sand material for pond base	11/1/2011	SO	Mitkem	11/1/2011		12/22/2011	
CD-M31-1-FL	M-31	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-N31-1-FL	N-31	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-O31-1-FL	O-31	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-O32-1-FL	O-32	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-O33-1-FL	O-33	Floor sample in central excavation @ 6' BG.	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
DUP110211	O-32	Field duplicate of sample CD-O32-1-FL	11/2/2011	SO	Mitkem	11/2/2011	11/7/2011	12/22/2011	
CD-WC-M-3-R3132	R-31 32	TCLP Metals only sample post maectite re treatment and lime treatment	11/2/2011	SO	Mitkem	11/2/2011	11/8/2011	12/22/2011	
CD-WC-V-T26	T-26	TCLP VOCs only sample post lime treatment	11/2/2011	SO	Mitkem	11/2/2011	11/9/2011	12/22/2011	
CD-LM34-2-FL	L/M-34	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for VOC failure.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-LM34-2-EW	L/M-34	Sidewall sample in northcentral excavation @ 7 BG. Add'l 2' excavated for VOC failure.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-J27-2-WW	J-27	Sidewall sample in northcentral excavation @ 5 BG. Add'l 2' excavated for VOC failure.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-1-WW	K-29	Sidewall sample in northcentral excavation @ 9 BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-1-NW	K-29	Sidewall sample in northcentral excavation @ 9 BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-1-SW	K-29	Sidewall sample in northcentral excavation @ 9 BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K29-3-FL	K-29	Floor sample in northcentral excavation @ 10' BG Add'l 2' excavated for VOC failure.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K3031-3-FL	K-30 31	Floor sample in northcentral excavation @ 10' BG Add'l 2' excavated for VOC failure.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-K30-1-SW	K-30	Sidewall sample in northcentral excavation @ 9 BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-K31-1-SW	K-31	Sidewall sample in northcentral excavation @ 9 BG.	11/3/2011	SO	Mitkem	11/3/2011	11/8/2011	12/22/2011	
CD-WC-BLK-19		Waste characterization sample for off-site disposal of black material (pile #19)	11/3/2011	SO	Mitkem	11/3/2011		11/11/2011	
CD-WC-BLK-20		Waste characterization sample for off-site disposal of black material (pile #20)	11/3/2011	SO	Mitkem	11/3/2011		11/11/2011	
CD-WC-SCSOIL-62		Waste characterization sample for off-site disposal of soil/shale (pile #62)	11/3/2011	SO	Mitkem	11/3/2011		11/11/2011	
CD-A7-3-FL	A-7	Floor sample in northwestern excavation @ 4' BG. Add'l 2' excavated for PCB failure	11/7/2011	SO	Mitkem	11/7/2011	11/11/2011	12/22/2011	
CD-A7-2-EW	A-7	Sidewall sample in northwestern excavation @ 3 BG. Add'l 2' excavated for PCB failure	11/7/2011	SO	Mitkem	11/7/2011	11/11/2011	12/22/2011	
CD-WC-SCSOIL-63		Waste characterization sample for off-site disposal of soil/shale (pile #63)	11/7/2011	SO	Mitkem	11/7/2011		11/16/2011	
CD-WC-SCDEB-64		Waste characterization sample for off-site disposal of debris (pile #64)	11/7/2011	SO	Mitkem	11/7/2011		11/16/2011	
CD-WC-SCSOIL-65		Waste characterization sample for off-site disposal of soil/shale (pile #65)	11/8/2011	SO	Mitkem	11/8/2011		11/16/2011	
CD-WC-SCSOIL-66		Waste characterization sample for off-site disposal of soil/shale (pile #66)	11/8/2011	SO	Mitkem	11/8/2011		11/16/2011	
CD-O33-2-FL	O-33	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for VOC failure.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-O33-1-NW	O-33	Sidewall sample in northcentral excavation @ 7 BG.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-O33-1-EW	O-33	Sidewall sample in northcentral excavation @ 7 BG.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-O33-1-WW	O-33	Sidewall sample in northcentral excavation @ 7 BG.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-J27-3-WW	J-27	Sidewall sample in northcentral excavation @ 5 BG. Add'l 2' excavated for VOC failure.	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
DUP111811	O-33	Field duplicate of sample CD-O33-2-FL	11/18/2011	SO	Mitkem	11/18/2011	11/23/2011	2/13/2012	
CD-K29-4-FL	K-29	Floor sample in northcentral excavation @ 12' BG Add'l 2' excavated for VOC failure.	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K29-2-NW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K29-2-WW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K29-2-SW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K30-2-SW	K-30	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-K31-2-SW	K-31	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
DUP112111	K-29	Field duplicate of sample CD-K29-2-SW	11/21/2011	SO	Mitkem	11/21/2011	11/28/2011	1/11/2012	
CD-WC-SCSOIL-67		Waste characterization sample for off-site disposal of soil/shale (pile #67)	11/21/2011	SO	Mitkem	11/21/2011		1/11/2012	
CD-WC-SCSOIL-68		Waste characterization sample for off-site disposal of soil/shale (pile #68)	11/21/2011	SO	Mitkem	11/21/2011		1/11/2012	
CD-P30-2-FL	P-30	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for VOC failure.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-Q29-2-FL	Q-29	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for VOC failure.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-Q30-2-FL	Q-30	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for VOC failure.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-R30-1-FL	R-30	Floor sample in northcentral excavation @ 6' BG.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-R31-1-FL	R-31	Floor sample in northcentral excavation @ 6' BG.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
CD-R32-1-FL	R-32	Floor sample in northcentral excavation @ 6' BG.	11/22/2011	SO	Mitkem	11/22/2011	11/29/2011	1/11/2012	
TRENCH-BF		FIO Sample taken per USEPA direction of backfill material from trench excavation	11/30/2011	SO	Mitkem	11/30/2011	12/5/2011	1/11/2012	
CD-R31-2-FL	R-31	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for PCB failure.	12/1/2011	SO	Mitkem	12/1/2011	12/5/2011	1/11/2012	
CD-R31-2-FL	R-32	Floor sample in northcentral excavation @ 8' BG Add'l 2' excavated for PCB failure.	12/1/2011	SO	Mitkem	12/1/2011	12/5/2011	1/11/2012	
CD-WC-SCSOIL-69		Waste characterization sample for off-site disposal of soil/shale (pile #69)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-WC-SCSOIL-70		Waste characterization sample for off-site disposal of soil/shale (pile #70)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-WC-ASPH-19		Waste characterization sample for off-site disposal of asphalt (pile #19)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-WC-ASPH-20		Waste characterization sample for off-site disposal of asphalt (pile #20)	12/6/2011	SO	Mitkem	12/6/2011		12/15/2011	
CD-K29-3-NW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	12/7/2011	SO	Mitkem	12/7/2011	12/12/2011	1/11/2012	
CD-K29-3-WW	K-29	Sidewall sample in norcentral excavation @ 11' BG Add'l 2' excavated for VOC failure.	12/7/2011	SO	Mitkem	12/7/2011	12/12/2011	1/11/2012	
CD-LM34-3-EW	L/M-34	Sidewall sample in northcentral excavation @ 7 BG. Add'l 2' excavated for VOC failure.	12/7/2011	SO	Mitkem	12/7/2011	12/12/2011	1/11/2012	
CD-A7-4-FL	A-7	Floor sample in northwestern excavation @ 6' BG. Add'l 2' excavated for PCB failure	12/8/2011	SO	Mitkem	12/8/2011	12/13/2011	1/11/2012	
CD-WC-SCSOIL-71		Waste characterization sample for off-site disposal of soil/shale (pile #71)	12/9/2011	SO	Mitkem	12/9/2011		12/16/2011	
CD-WC-SCSOIL-72		Waste characterization sample for off-site disposal of soil/shale (pile #72)	12/9/2011	SO	Mitkem	12/9/2011		12/16/2011	
TOP-120911		Topsoil material stockpiled on-site.	12/9/2011	SO	Mitkem	12/9/2011	12/14/2011	1/19/2012	
CD-WC-TANKTAR		Waste characterization sample for off-site disposal of tar-like material found in UST	12/12/2011	SO	Mitkem	12/12/2011		1/6/2012	
CD-LM34-4-EW	L/M-34	Sidewall sample in northcentral excavation @ 7 BG. Add'l 2' excavated for VOC failure.	12/13/2011	SO	Mitkem	12/13/2011	12/16/2011	1/19/2012	
CD-WC-SCSOIL-69a		Waste characterization sample for off-site disposal of soil/shale (pile #69a)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-69b		Waste characterization sample for off-site disposal of soil/shale (pile #69b)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-69c		Waste characterization sample for off-site disposal of soil/shale (pile #69c)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-69d		Waste characterization sample for off-site disposal of soil/shale (pile #69d)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCDEB-73		Waste characterization sample for off-site disposal of soil/shale/debris (pile #73)	12/15/2011	SO	Mitkem	12/15/2011		1/6/2012	
CD-WC-SCSOIL-71a		Waste characterization sample for off-site disposal of soil/shale (pile #71a)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-SCSOIL-72a		Waste characterization sample for off-site disposal of soil/shale (pile #72a)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-SCDEB-74		Waste characterization sample for off-site disposal of soil/shale/debris (pile #74)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-SCDEB-75		Waste characterization sample for off-site disposal of soil/shale/debris (pile #75)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-WC-ASPH-21		Waste characterization sample for off-site disposal of asphalt (pile #21)	12/23/2011	SO	Mitkem	12/23/2011		1/6/2012	
CD-L35-TP	L/M-35	Test pit sampled to see if excavation is necessary after L-34 EW failures	1/10/2012	SO	Mitkem	1/10/2012	1/13/2012	2/6/2012	
CD-TOT-71A		Post Excavation sample of pile #71a (screened pile) possible on-site backfill	1/11/2012	SO	Mitkem	1/11/2012	1/16/2012	2/6/2012	
CD-TOT-72A		Post Excavation sample of pile #72a (screened pile) possible on-site backfill	1/11/2012	SO	Mitkem	1/11/2012	1/16/2012	2/6/2012	
CD-TOT-73		Post Excavation sample of pile #73 (debris pile), possible on-site backfill	1/11/2012	SO	Mitkem	1/11/2012	1/16/2012	2/6/2012	
CD-WC-LM35		Waste characterization sample for off-site disposal of in-situ grids L/M-34/35/36	1/23/2012	SO	Mitkem	1/23/2012		2/2/2012	
CD-WC-ASPH-22		Waste characterization sample for off-site disposal of asphalt (pile #22)	1/23/2012	SO	Mitkem	1/23/2012		2/2/2012	

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-ASPH-23		Waste characterization sample for off-site disposal of asphalt (pile #23)	1/23/2012	SO	Mitkem	1/23/2012		2/2/2012	
CD-WC-M-SCSOIL-69c		TCLP Metals only sample, post Maectite treatment	1/23/2012	SO	Mitkem	1/23/2012	1/26/2012	2/13/2012	
CD-WC-M-SCSOIL-69d		TCLP Metals only sample, post Maectite treatment	1/23/2012	SO	Mitkem	1/23/2012	1/26/2012	2/13/2012	
CD-WC-RR-1		Waste characterization sample for off-site disposal of railroad material (pile #1)	2/23/2012	SO	Mitkem	2/23/2012		3/2/2012	
CD-WC-RR-2		Waste characterization sample for off-site disposal of railroad material (pile #2)	2/23/2012	SO	Mitkem	2/23/2012		3/2/2012	
CD-BF-MX-8		Sample taken of DGA backfill material from on-site stockpile	2/23/2012	SO	Mitkem	2/23/2012		3/19/2012	
CD-BF-MX-9		Sample taken off-site (@ Weldon Quarry) of DGA backfill material	2/23/2012	SO	Mitkem	2/23/2012		3/19/2012	
CDESS-COMFILL-001	TCLP	EME Plant, New Egypt, NJ	6/27/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	6/27/2012	7/12/2012	7/12/2012	See Report
CDESS-TOPSOIL-001	TCLP	EME Plant, New Egypt, NJ	6/27/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	6/27/2012	7/12/2012	7/12/2012	See Report
CDESS-COMFILL-002	TCLP	Weldon Quarry, Watchung, NJ (Maddox)	7/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/17/2012	8/13/2012	8/13/2012	See Report
CDESS-TOPSOIL-002	TCLP	Toll Bros Region Pit, Monroe, NJ (Maddox)	7/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/17/2012	8/13/2012	8/13/2012	See Report
CD-WC-140HVD-01-001	WC	140 Harvard Ave, Area 1	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-02-002	WC	140 Harvard Ave, Area 2	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-03-003	WC	140 Harvard Ave, Area 3	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-04-004	WC	140 Harvard Ave, Area 4	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-05-005	WC	140 Harvard Ave, Area 5	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-140HVD-06-006	PCB Only	140 Harvard Ave, Area 6	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	16.500
CD-WC-140HVD-07-007	PCB Only	140 Harvard Ave, Area 7	7/24/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	0.410
CD-WC-216DEL-01-008	WC	216 Delmore Ave, Area 1	7/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	7/25/2012	8/8/2012	8/8/2012	See Report
CD-WC-216DEL-01-009	PCB Only	216 Delmore Ave, Area 1	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.530
CD-WC-220DEL-01-010	PCB Only	216 Delmore Ave, Area 1	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	1.570
CD-WC-605HAM-A1-011	PCB Only	605 Hamilton Blvd, Area A	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.550
CD-WC-605HAM-B1-012	PCB Only	605 Hamilton Blvd, Area B	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.590
CD-WC-605HAM-C1-013	PCB Only	605 Hamilton Blvd, Area C	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.320
CD-WC-605HAM-C2-014	PCB Only	605 Hamilton Blvd, Area C	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.380
CD-WC-605HAM-E1-015	PCB Only	605 Hamilton Blvd, Area E	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	1.480

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CD-WC-108DEL-G1-016	PCB Only	108 Delmore Ave, Area G	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.350
CD-WC-108DEL-H1-017	PCB Only	108 Delmore Ave, Area H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.073
CD-WC-108DEL-H2-018	PCB Only	108 Delmore Ave, Area H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.470
CD-WC-112DEL-H3-019	PCB Only	112 Demore Ave, Area H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	0.257
CD-WC-605HAM-01-020	WC	605 Hamilton Blvd, Comp of Areas A-H	8/1/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	8/1/2012	8/22/2012	8/22/2012	See Report
CDE-OU1-1000GAR-RW1-021	PCB Only	1000 Garibaldi Ave, Right of Way, front.	10/3/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/3/2012	10/5/2012	10/23/2012	46.000
CDE-OU1-140HVD-03-022	PCBs +	140 Harvard Ave,	10/3/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/3/2012	10/5/2012	10/23/2012	0.210
CDE-OU1-GAR1000-FYR-024	PCBs +	1000 Garibaldi Ave, Front yard-Right	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/11/2012	10/23/2012	0.091
CDE-OU1-GAR1000-FYL-025	PCBs +	1000 Garibaldi Ave, Front yard-Left	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/11/2012	10/28/2012	1.570
CDE-WC-140HVD-01-026	WC	140 Harvard Ave, Area 1	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/16/2012	10/28/2012	See Report
CDE-OU1-140HVD-01-027	PCB+	140 Harvard Ave, Area 1	10/9/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/9/2012	10/11/2012	10/23/2012	2.400
CDE-OU1-109ARL-028	PCB+	109 Arlington Ave, Back Prop Line	10/11/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/11/2012	10/19/2012	10/31/2012	24.000
CDE-OU1-109ARL-029	PCB+	109 Arlington Ave, Back Prop Line	10/11/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/11/2012	10/19/2012	10/31/2012	0.110
CDE-OU1-109ARL-030	PCB+	109 Arlington Ave, Back Prop Line	10/11/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/11/2012	10/19/2012	10/31/2012	1.100
CDE-OU1-112DEL-H3-031	PCB+	112 Delmore Ave, Area H3, near 108 prop line. Near corner of garage, under fence.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	0.920
CDE-OU1- 108DEL-H2-032	PBC+	108 Delmore Ave, Area H2, at front slab of garage, 12"bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	ND
CDE-OU1-140HVD-01-NW-033	PCB+	140 Harvard Ave, Area 1, North Wall, 4'bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	0.900
CDE-OU1-140HVD-01-SW-034	PCB+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	6.900
CDE-OU1-140HVD-01-WW-035	PBC+	140 Harvard Ave, Area 1, West Wall, 4'bls.	10/17/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/18/2012	10/22/2012	10/23/2012	0.160
CDE-OU1-140HVD-01-SW2-036	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	11.000
CDE-OU1-1000GAR-FYL-037	PBC+	1000 Garibaldi Ave, Front Yard, Left,12"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.320
CDE-OU1-1000GAR-FYL-038	PBC+	1000 Garibaldi Ave, Front Yard, Left,12"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.210

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-1000GAR-FYL-039	PBC+	1000 Garibaldi Ave, Front Yard, Left,24"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.051
CDE-OU1-1000GAR-FYL-040	PBC+	1000 Garibaldi Ave, Front Yard, Left,12bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	0.610
CDE-OU1-109ARL-041	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	10/23/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/23/2012	10/25/2012	10/25/2012	2.800
CDE-OU1-140HVD-SW3-042	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/25/2012	10/29/2012	11/16/2012	1.200
CDE-OU1-140HVD-SW4-043	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/25/2012	10/29/2012	11/16/2012	4.100
CDE-OU1-140HVD-SW5-044	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	10/25/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	10/25/2012	10/29/2012	11/16/2012	1.800
CDE-OU1-140HVD-SW6-045	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	11/5/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/5/2012	11/7/2012	11/7/2012	1.750
CDE-OU1-140HVD-SW7-046	PBC+	140 Harvard Ave, Area 1, South Wall, 4'bls.	11/5/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/5/2012	11/7/2012	11/7/2012	0.058
CDE-OU1-109ARL-NW2-047	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	11/6/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/6/2012	11/12/2012	11/9/2012	0.490
CDE-OU1-109ARL-NW3-048	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	11/6/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/6/2012	11/12/2012	11/9/2012	0.323
CDE-OU1-109ARL-NW4-049	PBC+	109 Arlington Ave, Back Prop Line, 12"bls	11/6/2012	Soil	Mitkem Labs 175 Metro Center Blvd, Warick, RI 2886	11/6/2012	11/12/2012	11/9/2012	0.112
CDE-OU1-WC-419HAN-D2-050	WC	419 Hancock St, Areas 2,3,4. 3-9"bls.	2/20/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/20/2013	NA	3/4/2013	See Report
CDE-OU1-WC-417HAN-C-051	WC	417-419 Hancock St., Areas C, D1. 3-9"bls.	2/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/21/2013	NA	3/4/2013	See Report
CDE-OU1-WC-413HAN-AB-052	WC	413 Hancock St., Areas A/B, 6/15"bls.	2/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/22/2013	NA	3/6/2013	See Report
CDE-OU1-WC-329HAN-B-053	WC	329 Hancock St., Areas A/B, 9/3-6"bls.	2/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/26/2013	NA	3/6/2013	See Report
CDE-OU1-WC-211NMK-D-054	WC	211 New Market Ave., Areas ABCD, 3-12"bls	2/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/26/2013	NA	3/6/2013	See Report
CDE-OU1-COMFIL-022813	TCLP	EME Plant, New Egypt, NJ	2/28/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/28/2013	NA	3/23/2013	See Report
CDE-OU1-TOPSOIL-022813	TCLP	EME Plant, New Egypt, NJ	2/28/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	2/28/2013	NA	3/23/2013	See Report
CDE-OU1-329HAN-BY-055	PCB+	329 Hancock St., Backyard, 2' bls.	5/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	5/15/2013	5/23/2013	6/4/2013	0.041
CDE-OU1-WC-135TRE-01-056	WC	135 Tremont Avenue, Area 1 of 3	5/29/2013	Soil	Spectrum Analytical 11 Almgren Drive Agawam, MA 01001	5/30/2013	NA	6/12/2013	See Report
CDE-OU1-WC-135TRE-02-057	WC	135 Tremont Avenue, Area 2 of 3	5/29/2013	Soil	Spectrum Analytical 11 Almgren Drive Agawam, MA 01001	5/30/2013	NA	6/12/2013	See Report
CDE-OU1-WC-135TRE-03-058	WC	135 Tremont Avenue, Area 3 of 3	5/29/2013	Soil	Spectrum Analytical 11 Almgren Drive Agawam, MA 01001	5/30/2013	NA	6/12/2013	See Report

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-39EW-059	PCB+	135 Tremont Ave, Grid 39, East Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	ND
CDE-OU1-135TRE-42NW-060	PCB+	135 Tremont Ave, Grid 42, North Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	0.096
CDE-OU1-135TRE-42WW-061	PCB+	135 Tremont Ave, Grid 42, West Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	0.130
CDE-OU1-135TRE-42SW-062	PCB+	135 Tremont Ave, Grid 42, South Wall	6/24/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	6/24/2013	6/26/2013	7/12/2013	0.140
CDE-OU1-135TRE-01NW-063	PCB+	135 Tremont Ave, Grid 1, North Wall	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.210
CDE-OU1-135TRE-01SW-064	PCB+	135 Tremont Ave, Grid 1, South Wall	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.230
CDE-OU1-135TRE-02NW-065	PCB+	135 Tremont Ave, Grid 2, North Wall	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.062
CDE-OU1-135TRE-02FL-066	PCB+	135 Tremont Ave, Grid 2, Floor	7/10/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/10/2013	NA	7/12/2013	0.023
CDE-OU1-135TRE-39NW-067	PCB+	135 Tremont Ave, Grid 39, North Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.080
CDE-OU1-135TRE-35SW-068	PCB+	135 Tremont Ave, Grid 35, South Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.098
CDE-OU1-135TRE-18EW-069	PCB+	135 Tremont Ave, Grid 18, East Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.180
CDE-OU1-135TRE-38WW-070	PCB+	135 Tremont Ave, Grid 38, West Wall	7/11/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/11/2013	NA	7/15/2013	0.073
CDE-OU1-135TRE-39FL-071	PCB+	135 TremontAve, Grid 39, Floor	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	0.800
CDE-OU1-135TRE-39WW-072	PCB+	135 TremontAve, Grid 39, West Wall	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	ND
CDE-OU1-135TRE-39EW-073	PCB+	135 TremontAve, Grid 39, South Wall	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	0.120
CDE-OU1-135TRE-18I-074	PCB+	135 TremontAve, Grid 18, Informational	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	2.000
CDE-OU1-135TRE-23I-075	PCB+	135 TremontAve, Grid 23, Informational	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	1.700
CDE-OU1-135TRE-12FL-076	PCB+	135 TremontAve, Grid 12, Floor, 22"bls	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	8.300
CDE-OU1-135TRE-35NW-077	PCB+	135 TremontAve, Grid 35, North Wall, 9"b	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	ND
CDE-OU1-135TRE-35EW-078	PCB+	135 TremontAve, Grid 35, East Wall, 3"bls	7/12/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/12/2013	NA	7/16/2013	13.000
CDE-OU1-135TRE-35FL-079	PCB+	135 TremontAve, Grid 35, Floor, 12"bls	7/17/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/17/2013	NA	7/17/2013	ND
CDE-OU1-135TRE-10FL-080	PCB+	135 TremontAve, Grid 10, Floor, 42"bls	7/17/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/17/2013	NA	7/17/2013	6.100

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-11FL-081	PCB+	135 TremontAve, Grid 11, Floor, 42"bls	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	NA	7/24/2013	15.000
CDE-OU1-135TRE-12FL-082	PCB+	135 TremontAve, Grid 12, Floor, 46"bls	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	NA	7/24/2013	0.180
CDE-OU1-135TRE-16FL-083	PCB+	Sample analysis was cancelled, change in sample location. Will resample in future.	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	Analysis Cancelled	Analysis Cancelled	Analysis Cancelled
CDE-OU1-135TRE-12EW-084	PCB+	135 TremontAve, Grid 12 East Wall 42"bls	7/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/22/2013	NA	7/24/2013	0.035
CDE-OU1-135TRE-16FL-085	PCB+	135 TremontAve, Grid 16 Floor 36" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	2.100
CDE-OU1-135TRE-16NW-086	PCB+	135 TremontAve, Grid 16 N. Wall 42" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.940
CDE-OU1-135TRE-36NW-087	PCB+	135 TremontAve, Grid 36 N. Wall, 6" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.340
CDE-OU1-135TRE-36SW-088	PCB+	135 TremontAve, Grid 36 S. Wall, 6" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.033
CDE-OU1-135TRE-18FL-089	PCB+	135 TremontAve, Grid 18 Floor, 20" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.042
CDE-OU1-135TRE-12SW-090	PCB+	135 TremontAve, Grid 12 S. Wall, 28" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	ND
CDE-OU1-135TRE-18SW-091	PCB+	135 TremontAve, Grid 18 S. Wall, 12" bls	7/23/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/23/2013	NA	7/25/2013	0.084
CDE-OU1-135TRE-23EW-092	PCB+	135 TremontAve, Grid 23 E. Wall, 14" bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	0.250
CDE-OU1-135TRE-23SW-093	PCB+	135 TremontAve, Grid 23 S. Wall, 14" bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	ND
CDE-OU1-135TRE-11SW-094	PCB+	135 Tremont Ave, Grid 11 S. Wall, 30"bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	0.260
CDE-OU1-135TRE-12NW-095	PCB+	135 Tremont Ave, Grid 12 N.Wall, 28"bls	7/25/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/25/2013	NA	7/29/2013	ND
CDE-OU1-135TRE-16EW-096	PCB+	135 Tremont Ave, Grid 16 E. Wall, 36"bls	7/29/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/29/2013	NA	7/31/2013	ND
CDE-OU1-135TRE-10NW-097	PCB+	135 Tremont Ave, Grid 10 N. Wall, 40"bls	7/29/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/29/2013	NA	7/31/2013	ND
CDE-OU1-135TRE-11NW-098	PCB+	135 Tremont Ave, Grid 11 N. Wall, 40"bls	7/29/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	7/29/2013	NA	7/31/2013	19.000
CDE-OU1-135TRE-6NW-099	PCB+	135 Tremont Ave, Grid 6 N. Wall, 12"bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	0.260
CDE-OU1-135TRE-6EW-100	PCB+	135 Tremont Ave, Grid 6 E. Wall, 12"bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	ND
CDE-OU1-135TRE-11/5NWW-101	PCB+	135 Tremont Ave, Grid 11/5 N. Wall-West, 40" bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	ND
CDE-OU1-135TRE-11/5NWE-102	PCB+	135 Tremont Ave, Grid 11/5 N. Wall-East, 40" bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	0.034

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-5NW-103	PCB+	135 Tremont Ave, Grid 5 N. Wall, 12" bls	8/1/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/1/2013	NA	8/5/2013	0.250
CDE-OU1-135TRE-3NW-104	PCB+	135 Tremont Ave, Grid 3 N. Wall, 6"bls	8/5/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/5/2013	8/7/2013	8/8/2013	5.000
CDE-OU1-135TRE-4NW-105	PCB+	135 Tremont Ave, Grid 4 N. Wall, 6"bls	8/5/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/5/2013	8/7/2013	8/8/2013	0.130
CDE-OU1-135TRE-10WW-106	PCB+	135 Tremont Ave, Grid 10 W. Wall, 36"bls	8/5/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/5/2013	8/7/2013	8/8/2013	5.200
CDE-OU1-135TRE-11/5NWW-107	PCB+	Cancelled	8/5/2013	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled
CDE-OU1-135TRE-8WW-108	PCB+	135 Tremont Ave, Grid 8 W. Wall, 9"bls	8/6/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/6/2013	NA	8/8/2013	0.160
CDE-OU1-135TRE-8SW-109	PCB+	135 Tremont Ave, Grid 8 S. Wall, 9"bls	8/6/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/6/2013	NA	8/8/2013	0.100
CDE-OU1-135TRE-24SW-110	PCB+	135 Tremont Ave, Grid 24 S. Wall, 12"bls	8/6/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/6/2013	NA	8/8/2013	0.110
CDE-OU1-135TRE-8FL-111	PCB+	135 Tremont Ave, Grid 8 Floor, 18"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.070
CDE-OU1-135TRE-15FL-112	PCB+	135 Tremont Ave, Grid 15 Floor, 18"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.057
CDE-OU1-135TRE-15WW-113	PCB+	135 Tremont Ave, Grid 15 W. Wall, 9'bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.500
CDE-OU1-135TRE-15/16WW-114	PCB+	135 Tremont Ave, Grid 15/16 W. Wall, 40"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	0.056
CDE-OU1-135TRE-22FL-115	PCB+	Cancelled	8/7/2013	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled
CDE-OU1-135TRE-22SW-116	PCB+	135 Tremont Ave, Grid 22 S. Wall, 22"bls	8/7/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/7/2013	8/9/2013	8/27/2013	7.300
CDE-OU1-135TRE-9/10WW-117	PCB+	135 Tremont Ave, Grid 9/10 W. Wall 36"bls	8/8/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/8/2013	NA	8/12/2013	ND
CDE-OU1-135TRE-19NW-118	PCB+	135 Tremont Ave, Grid 19 N. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-19SW-119	PCB+	135 Tremont Ave, Grid19 S. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.036
CDE-OU1-135TRE-19WW-120	PCB+	135 Tremont Ave, Grid 19 W. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.021
CDE-OU1-135TRE-19FL-121	PCB+	135 Tremont Ave, Grid 19 Floor, 14"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-20NW-122	PCB+	135 Tremont Ave, Grid 20 N. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.052
CDE-OU1-135TRE-20SW-123	PCB+	135 Tremont Ave, Grid 20 S. Wall, 6"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	0.028
CDE-OU1-135TRE-20FL-124	PCB+	135 Tremont Ave, Grid 20 Floor, 14"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-21SW-125	PCB+	135 Tremont Ave, Grid 21 S. Wall, 10"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/14/2013	NA	8/16/2013	ND
CDE-OU1-135TRE-22SWext-126	PCB+	135 Tremont Ave, Grid 22 S. Wall extention, 20"bls	8/14/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.140

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-135TRE-22EWext-127	PCB+	135 Tremont Ave, Grid 22 E. Wall extention, 20"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.110
CDE-OU1-135TRE-22WWext-128	PCB+	135 Tremont Ave, Grid 22 W. Wall extention, 20"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.600
CDE-OU1-135TRE-27EW-129	PCB+	135 Tremont Ave, Grid 27 E. Wall, 6"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.550
CDE-OU1-135TRE-27WW-130	PCB+	135 Tremont Ave, Grid 27 W. Wall, 6"bls	8/15/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	8/15/2013	8/19/2013	9/4/2013	0.130
CDE-OU1-NM1-A12-131	PCB+	New Market Ave. Right of Way, Fig. 1, Area A, 12"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	10/21/2013	NA	10/24/2013	ND
CDE-OU1-NM1-A18-132	PCB+	New Market Ave. Right of Way, Fig. 1, Area A, 18"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	HOLD			
CDE-OU1-NM1-B12-133	PCB+	New Market Ave. Right of Way, Fig. 1, Area B, 12"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	10/21/2013	NA	10/24/2013	ND
CDE-OU1-NM1-B18-134	PCB+	New Market Ave. Right of Way, Fig. 1, Area B, 18"bls	10/21/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	HOLD			
CDE-OU1-NM1-C12-135	PCB+	New Market Ave. Right of Way, Fig. 1, Area C, 12"bls	10/22/2013	Soil	Mitkem Labs 646 Camp Avenue North Kingstown, RI. 02852	10/22/2013	NA	10/25/2013	0.210
CDE-OU1-NM1-C18-136	PCB+	New Market Ave. Right of Way, Fig. 1, Area C, 18"bls	10/22/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-D12-137	PCB+	New Market Ave. Right of Way, Fig. 1, Area D, 12"bls	10/22/2013	Soil	Mitkem Labs 646 Camp	10/23/2013	NA	10/25/2013	0.290
CDE-OU1-NM1-D18-138	PCB+	New Market Ave. Right of Way, Fig. 1, Area D, 18"bls	10/22/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-E12-139	PCB+	New Market Ave. Right of Way, Fig. 1, Area E, 12"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/23/2013		10/28/2013	1.200
CDE-OU1-NM1-E18-140	PCB+	New Market Ave. Right of Way, Fig. 1, Area E, 18"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	0.100
CDE-OU1-NM1-F12-141	PCB+	New Market Ave. Right of Way, Fig. 1, Area F, 12"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/23/2013		10/28/2013	2.600
CDE-OU1-NM1-F18-142	PCB+	New Market Ave. Right of Way, Fig. 1, Area F, 18"bls	10/23/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	1.400
CDE-OU1-NMROW-143	WC	New Market Ave. ROW Waste Characterization composite sample	10/24/2013	Soil	Mitkem Labs 646 Camp				
CDE-OU1-NM1-G12-144	PCB+	New Market Ave. Right of Way, Fig. 1, Area G, 12"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	0.240
CDE-OU1-NM1-G18-145	PCB+	New Market Ave. Right of Way, Fig. 1, Area G, 12"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-H12-146	PCB+	New Market Ave. Right of Way, Fig. 1, Area H, 12"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	10/29/2013		11/1/2013	1.400
CDE-OU1-NM1-H18-147	PCB+	New Market Ave. Right of Way, Fig. 1, Area H, 18"bls	10/29/2013	Soil	Mitkem Labs 646 Camp	11/4/2013		11/7/2013	0.790
CDE-OU1-NM1-I12-148	PCB+	New Market Ave. Right of Way, Fig. 1, Area I, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	2.200
CDE-OU1-NM1-I18-149	PCB+	New Market Ave. Right of Way, Fig. 1, Area I, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-J12-150	PCB+	New Market Ave. Right of Way, Fig. 1, Area J, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	0.620
CDE-OU1-NM1-J18-151	PCB+	New Market Ave. Right of Way, Fig. 1, Area J, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM2-A12-152	PCB+	New Market Ave. Right of Way, Fig. 2, Area A, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	2.400
CDE-OU1-NM2-A18-153	PCB+	New Market Ave. Right of Way, Fig. 2, Area A, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.640
CDE-OU1-NM2-B12-154	PCB+	New Market Ave. Right of Way, Fig. 2, Area B, 12"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	10/30/2013		11/4/2013	0.390
CDE-OU1-NM2-B18-155	PCB+	New Market Ave. Right of Way, Fig. 2, Area B, 18"bls	10/30/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM2-C12-156	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.120
CDE-OU1-NM2-C18-157	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM2-D12-158	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.170
CDE-OU1-NM2-D18-159	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM3-A12-160	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.180
CDE-OU1-NM3-A18-161	PCB+	New Market Ave. Right of Way, Fig. 2, Area C, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM3-B12-162	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 12"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	10/31/2013		11/5/2013	0.560
CDE-OU1-NM3-B18-163	PCB+	New Market Ave. Right of Way, Fig. 2, Area D, 18"bls	10/31/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM1-F24-164	PCB+	New Market Ave. Right of Way, Fig. 1, Area F, 24"bls	11/4/2013	Soil	Mitkem Labs 646 Camp	11/4/2013		11/7/2013	1.100
CDE-OU1-NM4-A12-165	PCB+	New Market Ave. Right of Way, Fig. 4, Area A, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.084
CDE-OU1-NM4-A18-166	PCB+	New Market Ave. Right of Way, Fig. 4, Area A, 18"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM4-B12-167	PCB+	New Market Ave. Right of Way, Fig. 4, Area B, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.170
CDE-OU1-NM4-B18-168	PCB+	New Market Ave. Right of Way, Fig. 4, Area B, 18"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	HOLD			

SAMPLING TRACKING LOG

Sample ID	Analysis	Location Description	Sample Date	Sample Type	Lab Location	Shipping Date	Pre-Lim Anaytical	Validated Analytical	PCB Results (mg/Kg)
CDE-OU1-NM4-C12-169	PCB+	New Market Ave. Right of Way, Fig. 4, Area C, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.067
CDE-OU1-NM4-C18-170	PCB+	New Market Ave. Right of Way, Fig. 4, Area C, 18"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	HOLD			
CDE-OU1-NM4-D12-171	PCB+	New Market Ave. Right of Way, Fig. 4, Area D, 12"bls	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/8/2013	0.270
CDE-OU1-NM4-D18		**18" AUGER REFUSAL @ 14"**	11/5/2013						
CDE-OU1-NM1-I12-172	PCB+	New Market Ave. Right of Way, Fig. 1, Area I, 12"bls (**CORRECTED LOCATION**)	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/7/2013	0.057
CDE-OU1-NM1-J12-173	PCB+	New Market Ave. Right of Way, Fig. 1, Area J, 12"bls (**CORRECTED LOCATION**)	11/5/2013	Soil	Mitkem Labs 646 Camp	11/5/2013		11/7/2013	0.150

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/18/2012

TRANSMITTAL NO.: 01450A-16.1

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
2	Quality Assura Project Plan (QAPP) Rev 1	PRECON SUBMTL	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

QUALITY ASSURANCE PROJECT PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
OPERABLE UNIT 1 – SOIL REMEDIATION
SOUTH PLAINFIELD, NEW JERSEY

Prepared by:
Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Based on the Intergovernmental Data Quality Task Force
Uniform Federal Policy for Quality Assurance Project Plans
(Final Version 1, March 2005)

Revision 1: July 10, 2012

Comments on the Quality Assurance Project Plan, Revision 0 Cornell-Dubilier Superfund Site Operable Unit 1 – Soil Remediation			
Reviewer Comment No	**Section**	**Comment**	**Response**
1	General	This QAPP was prepared prior to identification and approval of a subcontracted laboratory. Therefore, the QAPP will require revision to include the laboratory-specific information required on the worksheets.	As applicable, worksheets have been revised to include laboratory-specific information for the subcontracted laboratory, Spectrum Analytical, Inc. of Warwick, Rhode Island.
2	General	The QAPP includes a couple of references to the Pennsylvania Department of Environmental Protection. If these are in error, please correct.	The excavated material may be disposed of at a facility located in Pennsylvania; therefore, the analytical requirements of the facility are governed by the Pennsylvania DEP. No changes made to the document based on this comment.
3	General	Several of the attached figures are from the plans and specs document and, as such, are meant to be printed on large paper. Please identify how you will ensure that the field crew has access to figures that are legible.	Large plots are available onsite. Worksheets #10 and #17-2 have been revised to direct the reader/field crew to the drawings available onsite.
4	Introduction, page 6	In this section and in Worksheet #10, please add description such as: *remedial design has been completed and the work included sampling and analysis to define the extent of the excavations to be performed under this QAPP.*	The Introduction (Site Specific Definition of the Problem) and Worksheet #10 (Problem Definition) have been revised.
5	Worksheet 2, page 8	Under dates and titles of QAPP, please include a reference to the Malcolm Pirnie QAPP for RD of OU1. Please confirm the most recent one is: Final QAPP, Cornell OU1, Vicinity Property Pre-Design Sampling, dated March 2008.	Worksheet #2 has been revised.
6	Worksheet 6, page 20	Please include communication pathways with USACE-NYD, USACE-KCD, and EPA.	Worksheet #6 has been revised.
7	Worksheet 9, page 23	For notes on May 5 conversation, please edit text to something like: "EPA Region 2's implementation of the FASTAC process provides the "for all non-time critical data collection projects, EPA Region 2 requires a sequential decision tree for procuring Superfund analytical services". The work described in this QAPP is time-critical, due to safety concerns with deep excavations in residential yards. Therefore, a subcontracted laboratory will be identified that can meet the required 5-day turn around time."	Worksheet #9 has been revised.

Comments on the Quality Assurance Project Plan, Revision 0 Cornell-Dubilier Superfund Site Operable Unit 1 – Soil Remediation			
Reviewer Comment No	**Section**	**Comment**	**Response**
8	Worksheet 10, page 24	The problem definition includes the indoor dust project. If no dust work will be done under this QAPP, please state that in the text.	The references to indoor dust have been removed from Worksheet #10. The Introduction, Project Background section has been revised to indicate that no indoor dust remediation will be conducted under the current contract.
9	Worksheet 10, page 24	The worksheet includes a description of three remediation areas. If there is the possibility that more areas will be added, please include how the information will be amended or revised to this QAPP.	A sentence has been added to Worksheet #10, indicated that an addendum will be submitted for any additional properties requiring remediation.
10	Worksheet 11, page 27	Text indicates that Automated Data Review (ADR) and Environmental Data Management System (EDMS) will be used for this project. Note that these programs are not a requirement of the project, but may be used at the contractor's discretion. The requirement is to submit the data to the Region II database.	E-mail correspondence with Amy Darpinian on 6/18/12 confirmed that waste characterization and backfill data is not required to be captured in the Region II database. No changes made to the document based on this comment.
11	Worksheet 13, page 45	Text described that data will be used to define the initial soil excavations. Although this is true, I believe the previous documents (plans and specs) also define the final soil excavations. Please revise.	Sevenson will be using the previous documents to drive the soil excavations; no pre- or post-excavation sampling will be conducted by Sevenson. Worksheet #13 has been revised to read "Historical data that will define the limits of the soil excavations."
12	Worksheet 14, page 46	Text describes identification of the disposal facilities. Note that the facility will need approval by USACE and EPA prior to use. If this is not described in a different plan, please include it in this QAPP.	A reference to the Transportation and Disposal Plan has been added to Worksheet #14. It is understood that the facility will need approval prior to use.
13	Worksheet 14, page 46	For the topsoil/backfill sampling effort, please give the NJDEP citation for analytical requirements.	References to NJAC 7:26D and NJAC 7:26E have been added to Worksheet #14.
14	Worksheet 17-1 and others	Are the sampling procedures described applicable to backfill? Identify how the location and depth will be selected.	The sampling procedures described are applicable to backfill sampling. The sample location is determined when the facility point of contact identifies which pile of backfill material will be used for the site. The depth is determined as described in Worksheet #17 (i.e., at a minimum from the top six inches of soil).
15	Worksheet 14, page 46	For QC Tasks, please include the tasks described in Worksheet 31.	Further details have been added to Worksheet #14 regarding Sevenson field QC activities.
16	Worksheet 14, page 46	Please define the task, such as, "the contractor has reviewed the reports and … to develop the current QAPP".	Worksheet #14, Secondary Data section has been revised.

Comments on the Quality Assurance Project Plan, Revision 0 Cornell-Dubilier Superfund Site Operable Unit 1 – Soil Remediation			
Reviewer Comment No	**Section**	**Comment**	**Response**
17	Worksheet 14, page 46	Please include the requirement to submit the data to the EPA R2 database.	E-mail correspondence with Amy Darpinian on 6/18/12 confirmed that waste characterization and backfill data is not required to be captured in the Region II database. No changes made to the document based on this comment.
18	Worksheets 18, 19, and others	For analysis of VOCs, please use the designation of "trace" concentration levels. For all others, use the designation of "low". We certainly don't expect out backfill samples to have high concentrations.	All applicable worksheets have been revised to read "trace" for VOCs and "low" for all other parameters with respect to backfill sample concentration levels. No changes were made to the concentration levels for the waste characterization samples – there are locations with high concentrations of PCBs.
19	Worksheet 21	The sampling SOP is cited as the NJDEP Field Sampling Procedures Manual, August 2005 as described with text on Worksheet 17. As the manual is 574 pages, please add more guidance on this page for specific procedures, such as citing sections of the manual.	Worksheet #21 has been revised to include specific sections of the NJDEP Manual that should be referenced.

QUALITY ASSURANCE PROJECT PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
OPERABLE UNIT 1 – SOIL REMEDIATION
SOUTH PLAINFIELD, NEW JERSEY

Prepared by:
Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Based on the Intergovernmental Data Quality Task Force
Uniform Federal Policy for Quality Assurance Project Plans
(Final Version 1, March 2005)

Revision 1: July 10, 2012

Page intentionally left blank

TABLE OF CONTENTS

Introduction 5
QAPP Worksheet #1. Title and Approval Page 8
QAPP Worksheet #2. QAPP Identifying Information 9
QAPP Worksheet #3. Distribution List 14
QAPP Worksheet #4. Project Personnel Sign-Off Sheet 15
QAPP Worksheet #5. Project Organizational Chart 18
QAPP Worksheet #6. Communication Pathways 21
QAPP Worksheet #7. Personnel Responsibilities and Qualifications Table 23
QAPP Worksheet #8. Special Personnel Training Requirements Table 24
QAPP Worksheet #9. Project Scoping Session Participants Sheet 25
QAPP Worksheet #10. Problem Definition 26
QAPP Worksheet #11. Project Quality Objectives/Systematic Planning Process Statements 28
QAPP Worksheet #12. Measurement Performance Criteria Table 30
QAPP Worksheet #13. Secondary Data Criteria and Limitations Table 47
QAPP Worksheet #14. Summary of Project Tasks 48
QAPP Worksheet #15. Reference Limits and Evaluation Table 50
QAPP Worksheet #16. Project Schedule/Timeline Table 67
QAPP Worksheet #17. Sampling Design and Rationale 68
QAPP Worksheet #18. Sampling Locations and Methods/SOP Requirements Table 73
QAPP Worksheet #19. Analytical SOP Requirements Table 75
QAPP Worksheet #20. Field Quality Control Sample Summary Table 78
QAPP Worksheet #21. Project Sampling SOP Reference Table 80
QAPP Worksheet #22. Field Equipment Calibration, Maintenance, Testing, and Inspection Table 81
QAPP Worksheet #23. Analytical SOP Reference Table 82
QAPP Worksheet #24. Analytical Instrument Calibration Table 84
QAPP Worksheet #25. Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table 93
QAPP Worksheet #26. Sample Handling System 96
QAPP Worksheet #27. Sample Custody Requirements 97
QAPP Worksheet #28. QC Samples Table 101
QAPP Worksheet #29. Project Documents and Records Table 121
QAPP Worksheet #30. Analytical Services Table 122
QAPP Worksheet #31. Planned Project Assessment Table 124
QAPP Worksheet #32. Assessment Findings and Response Actions 125
QAPP Worksheet #33. QA Management Reports Table 126
QAPP Worksheet #34. Sampling and Analysis Verification (Step I) Process Table 127
QAPP Worksheet #35. Sampling and Analysis Validation (Steps IIa and IIb) Process Table 128
QAPP Worksheet #36. Sampling and Analysis Validation (Steps IIa and IIb) Summary Table 129
QAPP Worksheet #37. Data Usability Assessment 131

LIST OF ATTACMENTS AND APPENDICES

Appendix 1 – Figures
- Site Location Map
- Key Map
- Property 108, 129, 301, and 303 Excavation Plan
- Property 116 and 302 Excavation Plan
- Property 128, 304, and 305 Excavation Plan

Appendix 2 – Data Needs Table
Appendix 3 – Data Quality Objectives
Appendix 4 – Measurement Performance Critiera
Appendix 5 – Standard Sample Tracking and Documentation Forms, Review Forms, and Checklists
- Sample Identification Label
- Chain of Custody Form
- Preparatory Phase Checklist
- Initial/Follow-Up Phase Inspection Checklist
- Daily Chemical Quality Control Report
- Site QC Inspection Report
- Task Specific QC Checklist – Work Task: Packing, Storing, and Shipment of Samples
- Task Specific QC Checklist – Work Task: Field Documentation
- Task Specific QC Checklist – Work Task: Decontamination
- Task Specific QC Checklist – Work Task: Sample Cooler Shipment
- Field Change Request Form
- Non-Conformance/Quality Control Report

LIST OF ABBREVIATIONS AND ACRONYMS

ADR	Automated Data Review
ANSETS	Analytical Services Tracking System
AOC	Administrative Order of Consent
ATSDR	Agency for Toxic Substances and Disease Registry
BFB	Bromofluorobenzene
bgs	Below Ground Surface
CA	Corrective Action
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CHMM	Certified Hazardous Materials Manager
CIH	Certified Industrial Hygienist
COC	Chain of Custody
COD	Chemical Oxygen Demand
COR	Contracting Officer Representative
CQCSM	Contractor Quality Control Systems Manager
CVAA	Cold Vapor Atomic Absorption
DFTPP	Decachlorotriphenylphosphine
DOD	Department of Defense
DQI	Data Quality Indicator
DQO	Data Quality Objective
DSC	D.S.C. of Newark Enterprises, Inc.
EDD	Electronic Data Deliverable
EDMS	Environmental Data Management System
ELAP	Environmental Laboratory Accreditation Program
FASTAC	Field and Analytical Services Teaming Advisory Committee
FWHM	Full Width at Half Maximum
GC-ECD	Gas Chromatography with Electron Capture Detector
GC/MS	Gas Chromatography/Mass Spectroscopy
ICB	Initial Calibration Blank
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectrometry
ICS	Interference Check Sample
ICV	Initial Calibration Verification
KCD	Kansas City District
LCS	Laboratory Control Sample
LIMS	Laboratory Information Management System
LOD	Limit of Detection
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MPC	Measurement Performance Criteria
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NAD	Normalized Absolute Difference
NJDEP	New Jersey Department of Environmental Protection
NORM	Naturally Occurring Radioactive Material
NPL	National Priorities List
NYD	New York District
OSHA	Occupational Safety and Health Administration
OU-1	Operable Unit 1
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PM	Project Manager
ppm	Parts Per Million
PQL	Practical Quantitation Limit

PRAC	Pre-Placed Remedial Action Contract
QA	Quality Assurance
QC	Quality Control
QCSR	Quality Control Summary Report
QL	Quantitation Limit
QSM	Quality Systems Manual
RCRA	Resource Conservation and Recovery Act
RDCSRS	Residential Direct Contact Soil Remediation Standards
REM	Registered Environmental Manager
RL	Reporting Limit
ROD	Record of Decision
RPD	Relative Percent Difference
RPM	Remedial Project Manager
RRF	Relative Response Factor
RSD	Relative Standard Deviation
Sevenson	Sevenson Environmental Services, Inc.
SOP	Standard Operating Procedure
Spectrum	Spectrum Analytical, Inc.
SSHERP	Site Safety, Health, and Emergency Response Plan
SSHO	Site Safety and Health Officer
SVOC	Semi-Volatile Organic Compound
TBD	To Be Determined
TCLP	Toxicity Characteristic Leachate Procedure
TSCA	Toxic Substance Control Act
UFP- QAPP	Uniform Federal Policy - Quality Assurance Project Plan
UPS	United Parcel Service
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
yd^3	Cubic Yard

INTRODUCTION

Project Background

The Cornell-Dubilier Electronics Superfund Site (the site) is located at 333 Hamilton Boulevard in South Plainfield, Middlesex County, New Jersey. A site location map is included in Appendix 1. The United States Environmental Protection Agency (USEPA) assigned identification number NJD981557879 to the site.

The site consists of approximately 26 acres including the Hamilton Industrial Park, contaminated portions of the Bound Brook adjacent to and downstream of the industrial park, and contaminated residential, municipal, and commercial properties in the vicinity of the former Cornell-Dubilier Electronics Corporation, Inc. facility. Former buildings on the site have been demolished and their footprints covered with temporary asphalt pavement. The only remaining building at the site is a water tower. The site is bounded by the Lehigh Valley Railroad, Perth Amboy Branch (presently Conrail) to the northeast, the South Plainfield Department of Public Works property to the southeast, by single-family residential properties across Spicer Avenue to the southwest, and by mixed residential and commercial properties across Hamilton Boulevard to the northwest. The area is a busy, heavily developed, mixed-use neighborhood.

The site remediation was separated into multiple Operable Units. The scope of the current remedial action is Operable Unit 1 (OU-1), specifically remediation of residential, commercial, and municipal properties in the vicinity of the former Cornell-Dubilier Electronics facility. The response action selected in the Record of Decision (ROD) dated September 2003 for OU-1 soils includes:

- Excavation of contaminated soil containing polychlorinated biphenyls (PCBs) from properties, backfilling with clean fill, and property restoration as necessary.
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary.
- Indoor dust remediation where PCB-contaminated dust is encountered.
- Where necessary, temporary relocation of residents during the indoor remediation.

The purpose of this Uniform Federal Policy – Quality Assurance Project Plan (UFP-QAPP) is to provide procedures for the collection, analysis, and evaluation of data for the OU-1 soils in accordance with the response action selected in the ROD. No work will be conducted under the current contract with regards to the indoor dust remediation.

Site History and Contaminants

Cornell-Dubilier Electronics manufactured electronic parts and components, including capacitors, from 1936 to 1962. PCBs and chlorinated organic degreasing solvents were used in the manufacturing process. It is alleged that during the period of operation, Cornell-Dubilier Electronics dumped PCB-contaminated materials and other hazardous substances directly onto site soils. A former employee has claimed that the rear of the property was saturated with transformer oils and that capacitors were also buried behind the facility during the same time period (Foster Wheeler, 2002). Based on historic site practices, portions of the site have the potential to be contaminated with volatile organic compounds (VOCs; primarily trichloroethene and dechlorination products), PCBs, dioxins, metals (primarily mercury and lead), and other constituents of potential concern. Historical site data pertaining to OU-1 are summarized in the documents included in Worksheet #13 of this UFP-QAPP.

State and Federal Response Actions

In June 1994, at the request of the New Jersey Department of Environmental Protection (NJDEP), USEPA collected and analyzed soil, surface water, and sediments at the facility. The results of the sample analyses revealed that elevated levels of PCBs, VOCs, and inorganic chemicals were present at the site.

In February, June, and July 1996, USEPA collected and analyzed additional soil samples at the facility. The results confirmed the presence of elevated levels of PCBs, and also identified the presence of lead.

As a result of the contamination found at the facility, in March 1997, USEPA ordered the owner of the facility property, D.S.C. of Newark Enterprises, Inc., (DSC) to perform a removal action to mitigate risks associated with contaminated soil and surface water runoff from the facility. The removal action included paving driveways and parking areas in the industrial park, installing a security fence, and implementing drainage controls.

In 1997, USEPA conducted a preliminary investigation of the Bound Brook to evaluate the potential impacts of contamination on human health and the environment. Elevated levels of PCBs were found in fish and sediments of the Bound Brook. As a result of these investigations, NJDEP issued a fish consumption advisory for Bound Brook and its tributaries, including New Market Pond and Spring Lake.

In October and November 1997, USEPA collected soil and indoor dust samples from residential properties on Spicer Avenue, near the facility property. USEPA and the Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the data obtained from this sampling and concluded that exposure to dust and soil posed a potential health concern for residents at several of the properties tested. To limit the potential for exposure to PCBs until a final remedy could be selected, USEPA initiated another removal action to clean the interiors of seven homes on Spicer Avenue, Garibaldi Avenue, and Hamilton Boulevard. USEPA performed interior cleaning on seven properties and entered into an administrative order of consent (AOC) with DSC and Cornell-Dubilier Electronics for removal of contaminated soil from six properties. Interior dust remediation was completed in April 1998, and removal of PCB-contaminated soil was completed in September 1999.

In 1998, USEPA expanded its investigation to Delmore Avenue and Hamilton Boulevard near the industrial park. Again, USEPA determined that PCBs found in dust and soil posed a potential health concern for residents. USEPA cleaned the interiors of eight homes on Delmore Avenue and Hamilton Boulevard, and entered into another AOC for removal of contaminated soil from seven properties. These removal actions were completed in January 2000, further limiting the potential for exposure until a final remedy could be selected.

In July 1998, USEPA included the site on the National Priorities List (NPL).

Site Specific Definition of the Problem

A complete description of the problem definition is included in Worksheet #10 of this UFP-QAPP. Work is being conducted at properties located in the vicinity of the former Cornell-Dubilier Electronics facility due to contamination found in soil associated with past industrial operations conducted at the site. A remedial design for OU-1 soil has been completed, and the work included the sampling and analysis required to define the extent of the excavations to be performed under this UFP-QAPP. Sevenson will be responsible for removal of contaminated soil based upon the predetermined limits of excavation; backfilling of excavations with offsite materials; transportation of all soil and debris to an offsite disposal

facility; site restoration and implementation of appropriate site controls; and other activities necessary for complete and proper remediation of the site.

QAPP Worksheet #1
Title and Approval Page

Site Name/Project Name: Cornell-Dubilier Electronics Superfund Site

Site Location: South Plainfield, New Jersey

Document Title: Uniform Federal Policy – Quality Assurance Project Plan for Cornell-Dubilier Electronics Superfund Site, Operable Unit 1 - Soil Remediation

Lead Organization: United States Army Corps of Engineers (USACE) – Kansas City District (KCD), USACE – New York District (NYD), and USEPA Region II

Preparer's Name and Organizational Affiliation: Jennifer Singer, Sevenson Environmental Services, Inc. (Sevenson)

Preparer's Address, Telephone Number, and E-mail Address: 2749 Lockport Road, Niagara Falls, New York 14305; (716) 284-0431; jsinger@sevenson.com

Preparation Date: Revision 1: July 10, 2012

Contractor's Project Manager: 10 JULY 12
Signature, Date
Kim Lickfield, Sevenson Environmental Services, Inc.

Contractor's Project QA Officer: 7-10-12
Signature, Date
William Zambrana, Sevenson Environmental Services, Inc.

Lead Organization's Project Manager: _____
Signature, Date
Ken Mass, USACE

Approval Signatures: _____
Signature, Date
Diego Garcia, USEPA

Other Approval Signatures: _____
Signature, Date
Patrick Nejand, USACE COR

_____
Signature, Date

_____
Printed Name/Title/Organization

QAPP Worksheet #2
QAPP Identifying Information

Site Name/Project Name: Cornell-Dubilier Electronics Superfund Site

Site Location: South Plainfield, New Jersey

Site Number/Code: NJD981557879

Operable Unit: OU1 – Soil Remediation

Contractor Name: Sevenson Environmental Services, Inc.

Contractor Number: W912DQ-10-D-3006

Contract Title: Large Business Remediation Services Pre-Placed Remedial Action Contract (PRAC)

Work Assignment Number: Task Order #0002

1. Identify guidance used to prepare QAPP:
Uniform Federal Policy for Quality Assurance Project Plans, Final Version 1, March 2005
Guidance on Systematic Planning Using the Data Quality Objective Process, EPA QA/G-4, EPA/240/B-06/006, February 2006

2. Identify regulatory program:
USEPA Region II, Superfund

3. Identify approval entity:
USEPA Region II, USACE-KCD, USACE-NYD

4. Indicate whether the QAPP is a generic or a project-specific QAPP.

5. List dates of scoping sessions that were held: May 2012

6. List dates and titles of QAPP documents written for previous site work, if applicable:
Quality Assurance Project Plan – Final Soils (Malcolm Pirnie, Inc., August 2006)
Quality Assurance Project Plan – OU2, Cluster 12 (Sevenson, November 2006)
Quality Assurance Project Plan – OU2, Cluster 12, Revision 1 (Sevenson, December 2006)
Quality Assurance Project Plan – OU2, Cluster 12, Revision 2 (Sevenson, December 2006)
UFP-QAPP – OU-2, Building Demolition (Sevenson, April 2007)
UFP-QAPP – OU-2, Building Demolition, Addendum 1, Capacitor Disposal Area, Revision 3 (Sevenson, October 2007)
UFP-QAPP – OU1 Vicinity Property Pre-Design Sampling (Malcolm Pirnie, Inc., March 2008)
UFP-QAPP – OU-2, Soil Remediation, Revision 3 (Sevenson, April 2009)
UFP-QAPP – OU-2, Soil Remediation, Addendum 1, Temporary Water Treatment Facility, Revision 1 (Sevenson, November 2009)
UFP-QAPP – OU2, Soil Remediation, Addendum 2, Low-Temperature Thermal Desorption Operational Samples (Sevenson, March 2011)

7. List organizational partners (stakeholders) and connection with lead organization:
The project organizational partners include representatives from USEPA Region II, USACE-KCD, USACE-NYD, and Sevenson. The USEPA and USACE will provide project and contract management guidance to Sevenson. Sevenson will be the primary contractor and will be responsible for developing and implementing the remedial action and will provide project management to any other subcontractors.

8. List data users:
USEPA Region II, USACE-KCD, USACE-NYD, NJDEP, Sevenson

9. If any required QAPP elements and required information are not applicable to the project, then circle the omitted QAPP elements and required information on the attached table. Provide an explanation for their exclusion below:
No required QAPP elements were omitted.

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
Project Management and Objectives		
2.1 Title and Approval Page	1	- Title and Approval Page
2.2 Document Format and Table of Contents 2.2.1 Document Control Format 2.2.2 Document Control Numbering System 2.2.3 Table of Contents 2.2.4 QAPP Identifying Information	2	- Table of Contents - QAPP Identifying Information
2.3 Distribution List and Project Personnel Sign-Off Sheet 2.3.1 Distribution List 2.3.2 Project Personnel Sign-Off Sheet	3 4	- Distribution List - Project Personnel Sign-Off Sheet
2.4 Project Organization 2.4.1 Project Organizational Chart 2.4.2 Communication Pathways 2.4.3 Personnel Responsibilities and Qualifications 2.4.4 Special Training Requirements and Certification	5 6 7 8	- Project Organizational Chart - Communication Pathways - Personnel Responsibilities and Qualifications Table - Special Personnel Training Requirements Table
2.5 Project Planning/Problem Definition 2.5.1 Project Planning (Scoping) 2.5.2 Problem Definition, Site History, and Background	9 10 Site maps included in Appendix 1	- Project Planning Session Documentation (including Data Needs tables) - Project Scoping Session Participants Sheet - Problem Definition, Site History, and Background - Site Maps (historical and present)
2.6 Project Quality Objectives and Measurement Performance Criteria 2.6.1 Development of Project Quality Objectives Using the Systematic Planning Process 2.6.2 Measurement Performance Criteria	11 12	- Site-Specific PQOs - Measurement Performance Criteria Table

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
2.7 Secondary Data Evaluation	13	- Sources of Secondary Data and Information - Secondary Data Criteria and Limitations Table
2.8 Project Overview and Schedule 2.8.1 Project Overview 2.8.2 Project Schedule	14 15 16	- Summary of Project Tasks - Reference Limits and Evaluation Table - Project Schedule/Timeline Table
Measurement/Data Acquisition		
3.1 Sampling Tasks 3.1.1 Sampling Process Design and Rationale 3.1.2 Sampling Procedures and Requirements 3.1.2.1 Sampling Collection Procedures 3.1.2.2 Sample Containers, Volume, and Preservation 3.1.2.3 Equipment/Sample Containers Cleaning and Decontamination Procedures 3.1.2.4 Field Equipment Calibration, Maintenance, Testing, and Inspection Procedures 3.1.2.5 Supply Inspection and Acceptance Procedures 3.1.2.6 Field Documentation Procedures	17 18 19 20 21 22	- Sampling Design and Rationale - Sample Location Map - Sampling Locations and Methods/ SOP Requirements Table - Analytical Methods/SOP Requirements Table - Field Quality Control Sample Summary Table - Sampling SOPs - Project Sampling SOP References Table - Field Equipment Calibration, Maintenance, Testing, and Inspection Table
3.2 Analytical Tasks 3.2.1 Analytical SOPs 3.2.2 Analytical Instrument Calibration Procedures 3.2.3 Analytical Instrument and Equipment Maintenance, Testing, and Inspection Procedures 3.2.4 Analytical Supply Inspection and Acceptance Procedures	23 24 25	- Analytical SOPs - Analytical SOP References Table - Analytical Instrument Calibration Table - Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
3.3 Sample Collection Documentation, Handling, Tracking, and Custody Procedures 3.3.1 Sample Collection Documentation 3.3.2 Sample Handling and Tracking System 3.3.3 Sample Custody	26	- Sample Collection Documentation Handling, Tracking, and Custody SOPs - Sample Container Identification - Sample Handling Flow Diagram - Example Chain-of-Custody Form and Seal
3.4 Quality Control Samples 3.4.1 Sampling Quality Control Samples 3.4.2 Analytical Quality Control Samples	27	- QC Samples Table - Screening/Confirmatory Analysis Decision Tree
3.5 Data Management Tasks 3.5.1 Project Documentation and Records 3.5.2 Data Package Deliverables 3.5.3 Data Reporting Formats 3.5.4 Data Handling and Management 3.5.5 Data Tracking and Control	28 29	- Project Documents and Records Table - Analytical Services Table - Data Management SOPs
Assessment/Oversight		
4.1 Assessments and Response Actions 4.1.1 Planned Assessments 4.1.2 Assessment Findings and Corrective Action Responses	30 31	- Assessments and Response Actions - Planned Project Assessments Table - Audit Checklists - Assessment Findings and Corrective Action Responses Table
4.2 QA Management Reports	32	- QA Management Reports Table
4.3 Final Project Report		
Data Review		
5.1 Overview		

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
5.2 Data Review Steps 5.2.1 Step I: Verification 5.2.2 Step II: Validation 5.2.2.1 Step IIa Validation Activities 5.2.2.2 Step IIb Validation Activities 5.2.3 Step III: Usability Assessment 5.2.3.1 Data Limitations and Actions from Usability Assessment 5.2.3.2 Activities	33 34 35 36 37	- Verification (Step I) Process Table - Validation (Steps IIa and IIb) Process Table - Validation (Steps IIa and IIb) Summary Table - Usability Assessment
5.3 Streamlining Data Review 5.3.1 Data Review Steps To Be Streamlined 5.3.2 Criteria for Streamlining Data Review 5.3.3 Amounts and Types of Data Appropriate for Streamlining	36	

QAPP Worksheet #3
Distribution List

QAPP Recipients	Title	Organization	Telephone Number	Fax Number	E-mail Address	Document Control Number
Diego Garcia	Remedial Project Manager (RPM)	USEPA	(212) 637-4947		Garcia.diego@epamail.epa.gov	CDESS-QAPP-01
Ken Maas	KCD Project Manager (PM)	USACE	(816) 983-3709		Kenneth.e.maas@usace.army.mil	CDESS-QAPP-02
Patrick Nejand	Contracting Officer Representative (COR)	USACE	(732) 846-5830		Patrick.c.nejand@uace.army.mil	CDESS-QAPP-03
Paula Higgins	Chief NYD Safety	USACE	(212) 264-9050			CDESS-QAPP-04
Chris Nastasi	Project Engineer	USACE	(732) 846-5830		Chris.j.nastasi@usace.army.mil	CDESS-QAPP-05
Ben Girard	PM	Arcadis	(716) 667-0900		Ben.girard@arcadis-us.com	CDESS-QAPP-06
William Zambrana	Contractor Quality Control Systems Manager (CQCSM)	Sevenson	(908) 769-5301	(908) 769-5303	wzambrana@sevenson.com	CDESS-QAPP-07
Jennifer Singer	Data Quality Control Review Chemist	Sevenson	(716) 284-0431	(716) 285-4201	jsinger@sevenson.com	CDESS-QAPP-08
Agnes Huntley	PM	Spectrum Analytical, Inc. (Spectrum)	(401) 732-3400	(401) 732-3499	ang@spectrum-analytical.com	CDESS-QAPP-09

QAPP Worksheet #4-1
Project Personnel Sign-Off Sheet

Organization: Sevenson

Project Personnel	Title	Telephone Number	Signature	Date
Kim Lickfield	PM	(908) 769-5301		7-10-12
William Zambrana	CQCSM	(908) 769-5301		7-10-12
Ken Paisley	Regulatory Specialist	(716) 284-0431		7/10/12
Jennifer Singer	Data Quality Control Review Chemist	(716) 284-0431		7/10/12
Al LaGreca	Program Manager	(716) 284-0431		7/10/12

QAPP Worksheet #4-2
Project Personnel Sign-Off Sheet

Organization: USEPA

Project Personnel	Title	Telephone Number	Signature	Date
Diego Garcia	RPM	(212) 637-4947		

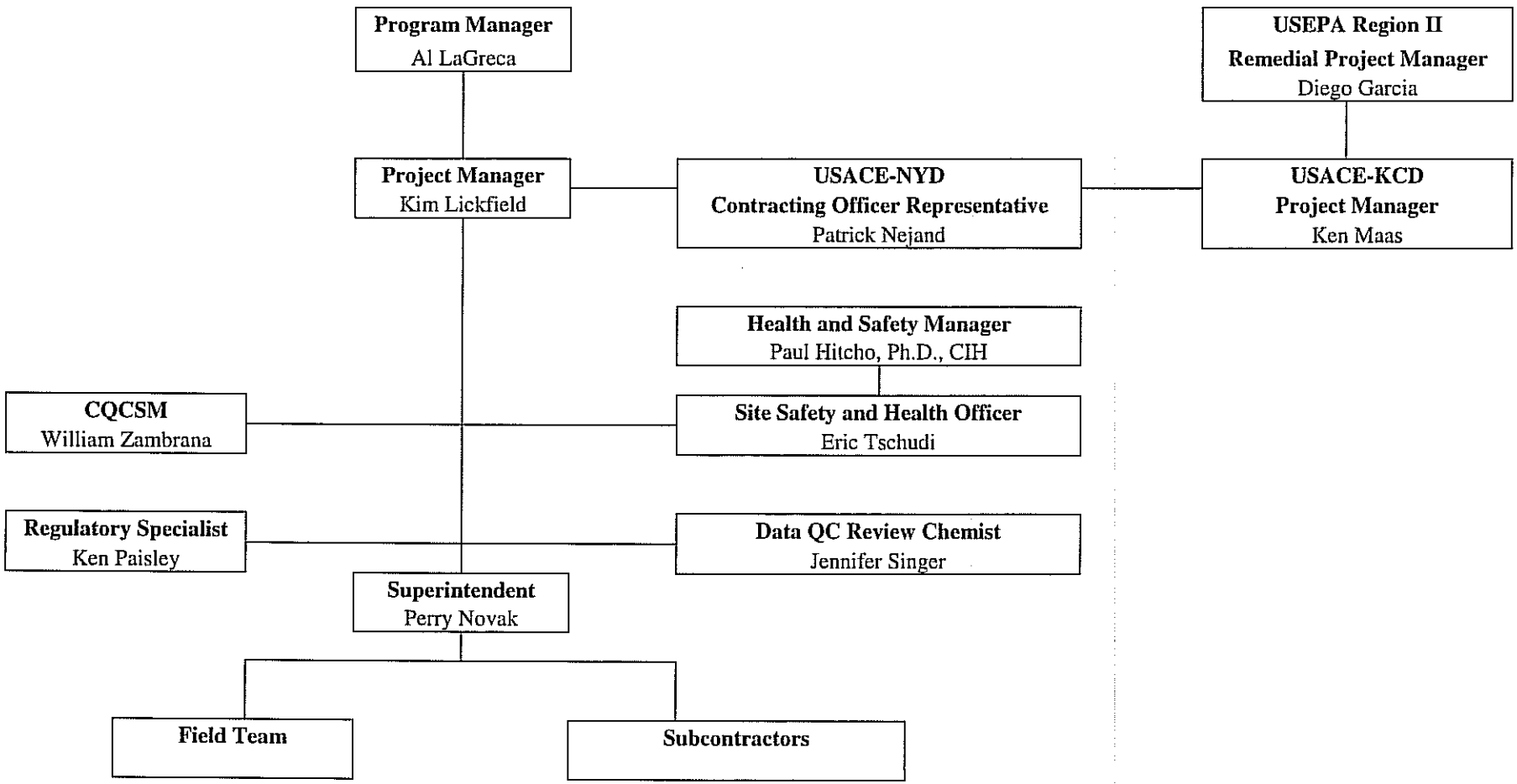
QAPP Worksheet #4-3
Project Personnel Sign-Off Sheet

Organization: USACE

Project Personnel	Title	Telephone Number	Signature	Date
Amy Darpinian	Project Chemist	(816) 389-3897		
Patrick Nejand	COR	(732) 846-5830		
Paula Higgins	Chief NYD Safety	(212) 264-9050		
Chris Nastasi	Project Engineer	(732) 846-5830		

QAPP Worksheet #5
Project Organizational Chart

The organizational chart and the description of project organization and the roles of the team members are summarized below:



Project/Task Organization Overview

The project management team will consist of representatives from USEPA Region II, USACE-KCD, USACE-NYD, NJDEP, and Sevenson. USACE-KCD holds the contract obligations for the project, while USACE-NYD is overseeing the operations aspect of the contract on behalf of USACE-KCD. USEPA and USACE will provide technical oversight to the project and contract management guidance to Sevenson. NJDEP will provide the USEPA with State approval. Sevenson will be the primary contractor and will be responsible for developing and implementing the remedial action and will provide project management to other subcontractors.

Cornell-Dubilier Site Team Members

This section contains a description of the project organizational structure. Diego Garcia is the USEPA RPM with responsibility for the site. Ken Maas is the USACE PM. Sevenson will be the primary contractor and will provide project management to other subcontractors.

Sevenson Home Office Personnel

Paul Hitcho, PhD, CIH –Health and Safety Manager. Dr. Hitcho is a Certified Industrial Hygienist (CIH) with over 20 years experience in managing health and safety issues for government and private remedial projects. Dr. Hitcho will be responsible for review and approval of the Site Safety, Health, and Emergency Response Plan (SSHERP). He will also provide Site Safety and Health Officer (SSHO) supervision, present initial site-specific training to all Site personnel, perform the respirator qualitative fit tests, and develop the air-monitoring program. He will conduct quarterly safety audits/inspections.

Al LaGreca – Program Manager. Mr. LaGreca will be ultimately responsible for the project's success. He will make available all Sevenson resources required to complete the project successfully. He will be kept informed of the project's progress and whether or not the contract is meeting its goals. Mr. LaGreca will resolve problems that cannot be resolved by the Project Manager or the Site Superintendent. He will periodically visit the site and become acquainted with field personnel and other representatives. It is anticipated Mr. LaGreca will be onsite once a month.

Kenneth Paisley, CHMM – Regulatory Specialist/Waste Disposal Coordinator. Mr. Paisley is committed to overseeing all field sampling and data acquisition plans, as well as interfacing with offsite laboratory concerns. Mr. Paisley will review laboratory reports with the selected laboratory in order to ensure compliance with project specifications and all required protocols. He will coordinate offsite waste removal, including transport, disposal, manifesting, waste profiles, regulatory compliance, and disposal requirements.

Jennifer Singer, REM – Data Quality Control Review Chemist. The Data Quality Control Review Chemist will support the CQCSM. Ms. Singer will perform a data review of all analytical data reports received from the laboratory prior to the submission of the data to the USACE and prior to preparation and completion of the chemical data reporting.

Sevenson Field Personnel

Kim Lickfield – Onsite Project Manager. The responsibilities of the Project Manager will include:

- Subcontractor coordination and oversight.
- Acting as liaison between Sevenson, USACE, and USEPA.
- Charge of all field operations.
- Hiring and termination/reassignment of personnel as necessary to support successful task order implementation.
- Management and coordination of all aspects of the project as defined in the Contract Specifications with an emphasis on adhering to the objectives of the remedial activities.
- Assuring corrective actions are taken for deficiencies cited during audits of sampling/analytical activities.
- Project coordination to implement and comply with the UFP-QAPP in coordination with the USACE, CQCSM, and Environmental Samplers, including the coordination of field and laboratory schedules pertaining to relevant operation/sampling activities and allocation of resources and staffing to implement the quality assurance (QA) and quality control (QC) program.
- Implementation of the SSHERP, including temporarily suspending field activities if the health and safety of personnel are endangered and/or temporarily suspending an individual for field activities for infractions of the SSHERP, pending further consideration by the Health and Safety Director.
- Review of all documents prepared by project personnel, including all relevant field records and logs.

William Zambrana – Contractor Quality Control Systems Manager. As CQCSM, Mr. Zambrana will report directly to the Project Manager on matters concerning quality control. He will have both the authority and the duty to stop whatever operation appears to be out of compliance with the contract documents. The CQCSM is responsible for field chemistry and environmental sampling staff, and responsibility for all records related to personnel, supplies, equipment use, equipment calibration, and waste transportation and disposal.

Eric Tschudi – Site Health and Safety Officer. As SSHO, Mr. Tschudi will report directly to the Corporate Health and Safety Director and be responsible for the implementation of Sevenson's approved SSHERP, including conducting required safety inspections, safety briefings, and reports of safety-related activities.

QAPP Worksheet #6
Communication Pathways

Communication Drivers	Responsible Entity	Name	Phone Number	Procedure
Communication with USEPA	USEPA RPM	Diego Garcia	(212) 637-4947	Primary point of contact with USEPA; can delegate communication to other internal or external points of contact; provides direction to USACE PM; communicates with NJDEP Case Manager.
Communication with USACE (lead agency - contracting)	USACE-KCD PM	Ken Maas	(816) 983-3709	Primary point of contact for USACE regarding contracting
Communication with USACE (lead agency – operations)	USACE-NYD COR	Patrick Nejand	(732) 846-5830	Primary point of contact with USACE regarding field operations; receives direction from USACE Contracting Officer; receives direction from USEPA RPM; provides direction to Sevenson.
UFP-QAPP Amendments	Sevenson	Jennifer Singer	(716) 284-0431	Sevenson Project Manager and CQCSM will initiate changes in the UFP-QAPP. Jennifer Singer will be responsible for revisions to the document. USACE and USEPA must approve all changes prior to implementation. Copies of amendments will be forwarded to all parties.
Change to Field Work	Sevenson	Field Team Leader	(908) 769-5301	Field Team Leader will notify Project Manager and CQCSM of any field variations. Project Manager will in turn notify USACE within 24 hours. Telephone and e-mail notifications are acceptable. All field changes will be documented as detailed in Worksheet #32.
Analytical Data Reporting	Sevenson	Jennifer Singer	(716) 284-0431	Jennifer Singer will review all analytical data. Any deficiencies will be reported to the Project Manager and laboratory Quality Assurance Officer.
Initiation of Corrective Action	Sevenson	William Zambrana	(908) 769-5301	Sevenson Project Manager and/or Data Quality Control Review Chemist will notify CQCSM of any issues and/or deficiencies who will in turn determine whether the need for corrective action is warranted.
Health and Safety	Sevenson	Eric Tschudi	(908) 769-5301	The SSHO will be responsible for ensuring the protocols specified in the SHERP are carried out during field activities. All safety matters will be reported to the SSHO who will in turn inform the Project Manager. If any issues arise during the field activities that the SSHO cannot address, the Corporate Health and Safety Manager, Dr. Paul Hitcho, will be immediately contacted.
Daily Field Sampling Paperwork	Sevenson	William Zambrana	(908) 769-5301	William Zambrana will e-mail or fax daily field sampling paperwork to the Project Manager and Data Quality Control Review Chemist within 2 business days.
Release of Analytical Data	Sevenson	Jennifer Singer William Zambrana	(716) 284-0431 (908) 769-5301	No analytical data can be released until Jennifer Singer has completed the data review and William Zambrana has approved the release.

Communication Drivers	Responsible Entity	Name	Phone Number	Procedure
Reporting Laboratory Data Quality Issues	Spectrum	Agnes Huntley	(401) 732-3400	The laboratory will report all QA/QC issues with project field samples to the CQCSM and Data Quality Control Review Chemist within 2 business days.

QAPP Worksheet #7
Personnel Responsibilities and Qualifications Table

Name	Title	Organizational Affiliation	Responsibilities	Education and Experience Qualifications
Al LaGreca	Program Manager	Sevenson	Oversees project and responds to USEPA and USACE	B.S. Civil Engineering
Kim Lickfield	PM	Sevenson	Manages project – coordinates between lead agency and subcontractors	A.A.S. Construction Technology
William Zambrana	CQCSM	Sevenson	QC oversight	A.S. – Radiation Technology
Jennifer Singer	UFP-QAPP Preparer and Data Quality Control Review Chemist	Sevenson	Prepares UFP-QAPP and performs data review	M.S.- Environmental Pollution Control B.S. – Biochemistry Registered Environmental Manager (REM) certification
Eric Tschudi	SSHO	Sevenson	Oversees health and safety for field activities	11 years Health and Safety experience
Ken Paisley	Regulatory Specialist/Waste Disposal Coordinator	Sevenson	Coordination of offsite waste removal	B.S. – Biology Certified Hazardous Materials Manager (CHMM) certification

QAPP Worksheet #8
Special Personnel Training Requirements Table[1]

Project Function	Specialized Training By Title or Description of Course	Training Provider	Training Date	Personnel/Groups Receiving Training	Personnel Titles/Organizational Affiliation	Location of Training Records/Certificates[2]
All Field Activities[3]	40-hour Annual 8-hour refresher	Sevenson	Various and Updated	All field team members	Sevenson staff, subcontractors	Sevenson database and onsite
Sample Collection	Trained in USEPA, USACE, and NJDEP standard sampling methods	Sevenson	Various and Updated	All field team members	Sevenson staff, subcontractors	Resumes
Sample Analysis	Trained in Department of Defense (DOD) Quality Systems Manual (QSM) and USEPA SW-846 methods	Project Laboratory	Various and Updated	Project Laboratory	All personnel	Laboratory
Data Review and Assessment	None – review performed by an experienced project chemist	Sevenson	Various	Jennifer Singer	Sevenson Data Quality Control Review Chemist	Sevenson database

[1] Other tasks requiring specialized skills and training will be performed by appropriately qualified subcontractors. Training, certification, and permit requirements will be outlined in separate scopes of work for each task.
[2] If training records and/or certificates are on file elsewhere, document their location in this column. If training records and/or certificates do not exist or are not available, then this should be noted.
[3] All field personnel will be required to be Occupational Safety and Health Administration (OSHA) trained.

QAPP Worksheet #9
Project Scoping Session Participants Sheet

Site Name: Cornell-Dubilier Electronics Superfund Site
Site Location: South Plainfield, New Jersey
Project Name: Operable Unit 1 Soil Remediation
Projected Date(s) of Sampling: July – December 2012
Project Manager: Kim Lickfield

Date of Session: May 2012, June 2012
Scoping Session Purpose: Discuss preparation of UFP-QAPP and subsequent responses to the USACE Project Chemist comments

Name	Title	Affiliation	Phone #	E-mail Address	Project Role
Jennifer Singer	Project Chemist	Sevenson	(716) 284-0431	jsinger@sevenson.com	UFP-QAPP Preparation
Ken Paisley	Regulatory Specialist	Sevenson	(716) 284-0431	kpaisley@sevenson.com	Regulatory Specialist
Kim Lickfield	Project Manager	Sevenson	(908) 769-5301	klickfield@sevenson.com	PM
William Zambrana	CQCSM	Sevenson	(908) 769-5301	wzambrana@sevenson.com	CQCSM
Amy Darpinian	Project Chemist	USACE	(816) 389-3897	Amy.f.darpinian@usace.army.mil	Project Chemist

May 2012: Sevenson internal discussion/e-mail correspondence regarding the scope of the project and completion of the UFP-QAPP.

May 5, 2012: E-mail correspondence received from Amy Darpinian following telephone conversation regarding the requirement to use the USEPA Field and Analytical Services Teaming Advisory Committee (FASTAC) process for lab procurement for project. USEPA Region 2's FASTAC analytical services strategy requires a tiered decision tree for procuring Superfund analytical services for all non-time critical data collection projects. The work described in this UFP-QAPP is time-critical, due to safety concerns with deep excavations at residential properties. Therefore, it was determined that a subcontracted laboratory would be procured that can meet the five-day turnaround time required for sample results.

June 16, 2012: E-mail correspondence received from Amy Darpinian regarding the requirement to submit data to the USEPA Region II database. The USEPA database does not require that backfill or waste characterization sample results be submitted for inclusion in the database; these are the only sample types expected to be collected by Sevenson. In the event that Sevenson collects any post-excavation soil samples (not anticipated at this time), the results will require submission to the USEPA Region II database.

QAPP Worksheet #10
Problem Definition

PROBLEM DEFINITION

The selected remedy involves the remediation of PCB contamination that is found on residential, commercial, and municipal properties located in the vicinity of the former Cornell-Dubilier Electronics facility. The following remedial action objectives for contaminated soil will address the human health risk and environmental concerns at residential, commercial, and municipal properties in the vicinity of the former Cornell-Dubilier Electronics facility:

- Reduce or eliminate the direct contact threat associated with contaminated soil to levels protective of current land use and considering potential future residential use.
- Prevent exposure and minimize disturbance to the surrounding community of South Plainfield during implementation of the remedial action.

USEPA is using 1 parts per million (ppm) as its Remediation Goal for this action.

A remedial design has been completed and the work included the sampling and analysis required to define the extent of the excavations to be performed under this UFP-QAPP. The remedial design had established three remediation areas to be addressed under the current action. Maps of the general locations of the areas in relation to the former Cornell-Dubilier Electronics facility, as well as specific excavation plans for each area are included in Appendix 1. Large plots of the figures included in Appendix 1 are available onsite and should be referenced for all field activities. The remediation areas are as follows:

- **Property 108, 129, 301, and 303** is located along Hamilton Boulevard and Delmore Avenue. There are eight excavation areas within the property grouping, with excavation depths ranging from 0" to 6" below ground surface (bgs), to 0" to 30" bgs (see Figure 1A, included in Appendix 1). The volume of the excavation is approximately 339 cubic yards (yd^3).
- **Property 116 and 302** is located between Delmore Avenue and Arlington Avenue. There are three excavation areas within the property grouping with excavation depths ranging from 0" to 6" bgs, to 0" to 24" bgs (see Figure 2A, included in Appendix 1). The volume of the excavation is approximately $52yd^3$.
- **Property 128, 304, and 305** is located along Harvard Avenue, Jackson Avenue, and Garibaldi Avenue. There are four excavation areas within the property grouping with excavation depths ranging from 0" to 24" bgs, to 0" to 48" bgs (see Figure 3A, included in Appendix 1). The volume of the excavation is approximately $2,105yd^3$.

If additional properties are identified which require remediation under this contract, an addendum to the UFP-QAPP will be submitted, including all applicable Worksheets.

PROJECT DESCRIPTION

This task addresses the remediation of soils associated with OU-1 of the site. The USEPA signed a ROD for the site in September 2003. The objectives of the current remedial action are:

- Excavation of approximately $2,500yd^3$ of contaminated soil, backfilling with clean fill, and property restoration, as necessary.
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary.

Constituents to be sampled include:

- Fill materials from offsite sources will be sampled and analyzed to prior to bringing it onsite.
- In-situ soil samples will be collected from the excavation areas in accordance with disposal facility criteria.
- Water removed from excavations and decontamination activities will be placed in a storage tank and analyzed in accordance with disposal facility criteria.

PROJECT DECISION CONDITIONS

Samples of topsoil and backfill materials from each offsite source will be collected and analyzed to verify that these materials do not contain contaminant levels that are hazardous to human health or the environment. Written approval from USACE will be received prior to bringing backfill or topsoil to the site. NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS; NJAC 7:26D, November 2009) will be used to determine if borrow materials are free from chemical contamination. NJDEP Unrestricted Use Standards for Radioactive Contamination (NJAC 7:28-12, 2008) will be used to determine if borrow materials are free from naturally occurring radioactive material (NORM). If the borrow materials contain concentrations of chemical or NORM greater than the applicable criteria, the source will be rejected. A new borrow source will be located and sampled for suitability.

Soil and water samples will be collected for waste characterization and disposal facility approval. Waste characterization sample results will be compared against the 40CFR261 *Characteristics of Hazardous Waste* and 40CFR761 *PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* to determine the disposal requirements. Any materials containing Resource Conservation and Recovery Act (RCRA) regulated constituents at concentrations greater than toxicity characteristic leachate procedure (TCLP) criteria will be disposed of as RCRA hazardous waste. Any materials containing concentrations of total PCBs greater than the regulatory standards will be disposed of as Toxic Substance Control Act (TSCA) regulated PCB remediation wastes. Any materials exceeding both criteria will be disposed of as RCRA/TSCA waste.

QAPP Worksheet #11
Project Quality Objectives/Systematic Planning Process Statements

WHO WILL USE THE DATA?

USEPA Region II, USACE-KCD, USACE-NYD, and Sevenson will use the data.

WHAT WILL THE DATA BE USED FOR?

- Backfill materials brought onsite will be sampled and analyzed to verify that the soil is clean for the intended use.
- Waste characterization samples will be collected and analyzed to assess suitability for disposal of waste soil, debris, and waste water. Analytical results from these samples will be submitted to the disposal facility to adequately classify waste materials.

WHAT TYPES OF DATA ARE NEEDED?

A table summarizing the Data Needs and Data Uses is included in Appendix 2.

HOW "GOOD" DO DATA NEED TO BE?

The data must be technically defensible and of sufficient quality as to support the project data quality objectives (DQO) which are described in Appendix 3. See Worksheet #15 which summarizes the analytes with the associated project action levels and project quantitation limits.

Analytical methods are planned to be definitive data quality. Definitive data is defined as data that are suitable for final decision making. They are generated using rigorous analytical methods such as approved USEPA SW-846 reference methods. Definitive data are not restricted in their use unless quality problems require data qualification resulting in unusable data.

WHEN WILL DATA BE COLLECTED?

Data will be collected over the duration of the project. It is expected that samples will be collected beginning in the summer 2012 per the project schedule included in Worksheet #16. The estimated number of samples to be collected at each sampling location is described in Worksheet #20.

WHO WILL COLLECT AND GENERATE THE DATA?

The Sevenson sampling team will collect all the samples. The samples will be analyzed for chemical parameters by a NJDEP and DOD Environmental Laboratory Accreditation Program (ELAP) certified subcontracted laboratory. Analytical data will be managed by Sevenson.

HOW WILL THE DATA BE REPORTED?

The data will be reported by the subcontracted laboratory to Sevenson. Sevenson will provide the data to USACE and USEPA for immediate use/decision making in an excel spreadsheet. Full laboratory data reports will be delivered directly to Sevenson for data review. Following receipt of the validated and/or reviewed data, Sevenson will generate a Quality Control Summary Report (QCSR). The QCSR will include a summary of all chemical sampling activities and will include an evaluation of the achievement of project DQO. In addition, analytical data will be reported electronically in a manner that is equivalent or may be transformed into a format consistent with the Electronic Data Deliverable (EDD) format

specified by USEPA Region II, as documented in *Electronic Data Deliverable (EDD) Comprehensive Specification Manual 1.1 (November 2007)*, and current updates. It is anticipated that the EDD will be reported by the subcontracted laboratory in USACE Automated Data Review (ADR) format. Following review of the data using the ADR software, the data will be maintained in the USACE Environmental Data Management System (EDMS) database, which will allow for generation of the data in the USEPA Region II EDD format. Hardcopy analytical data will meet USACE EM200-1-6 *Chemical Quality Assurance for HTRW Projects (October 1997)*. In addition, as required by USEPA Region II, Sevenson will adhere to the Analytical Services Tracking System (ANSETS) reporting requirement for all work performed by the subcontracted laboratory.

HOW WILL THE DATA BE ARCHIVED?

Electronic data will be archived in the EDMS project database to be maintained by Sevenson. As stated, sample results will be provided to USEPA for final upload to their systems in a manner consistent with the requirements of *Electronic Data Deliverable (EDD) Comprehensive Specification Manual 1.1 (November 2007)*, and current updates. Hard copies of laboratory reports will also be kept in the Sevenson project files. Data will be transferred to the USACE upon completion of the project. Retrieval of data by others will be at the discretion of the USACE and the USEPA. The length of time that records will be archived will be at the discretion of the USACE and the USEPA.

QAPP Worksheet #12
Measurement Performance Criteria Table

Precision, Accuracy, Representativeness, Completeness, and Comparability

To measure and control the quality of analyses, certain QA parameters are defined and utilized in data analysis activities. These parameters are defined below.

Precision. Precision measures the reproducibility of data or measurements under specific conditions. Precision in a quantitative measure of the variability of a group of data compared to their average value. Duplicate precision is stated in terms of relative percent difference (RPD) of absolute difference between two measurements. Measurement of precision is dependent upon sampling technique and analytical method. Field duplicate and laboratory duplicate samples will be used to measure precision for project samples. Both sampling and analysis will be as consistent as possible.

For chemical determinations, laboratory and field duplicate precision is stated in terms of RPD of absolute difference between two measurements. For a pair of measurements, RPD (or absolute difference) will be used, as presented below:

$$RPD = \left(\frac{|X_1 - X_2|}{\frac{(X_1 + X_2)}{2}} \right) \times 100$$

Where: X_1 and X_2 = the two replicate values

For radiological determinations, normalized absolute difference (NAD) is used to statistically determine the number of units of standard error of difference between means and the measured results differ from zero. NAD is calculated as presented below:

$$\text{NAD} = \frac{|\text{sample} - \text{replicate}|}{\sqrt{(U_{\text{sample}})^2 + (U_{\text{replicate}})^2}}$$

Where: Sample = concentration in the first sample (original)
Replicate = concentration in second sample (replicate)
U_{sample} = uncertainty of the sample
$U_{replicate}$ = uncertainty of the replicate

If the RPD or NAD acceptance criteria for field or laboratory duplicate samples are not achieved, field-sampling procedures will be reviewed with sampling personnel. In addition, the laboratory will be made aware of the discrepancy such that they may review internal sample preparation and analysis procedures.

Accuracy. Accuracy measures the bias in a measurement system. Sources of error include the sampling process, field contamination, preservation, handling, shipping, sample matrix, sample preparation, and analysis technique. Analytical accuracy will be assessed through surrogate spikes, matrix spikes, and laboratory control samples. In general, accuracy is measured in terms of percent recovery:

$$\%R = \frac{|SSR - SR|}{SA} \times 100$$

Where: SSR = measured value of the spiked sample
SR = measured value of the unspiked sample
SA = known amount of the spike in the sample

Representativeness. Representativeness expresses the degree to which data accurately and precisely reflects a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Representativeness is a qualitative parameter that is dependent upon the proper design and implementation of the sampling program and proper laboratory protocol. The sampling design created for this project was designed to provide data representative of site conditions. During development of the sampling designs, consideration was give to the past history of contamination at the site, existing analytical data, physical setting, and process. Representativeness will be satisfied by determining that the UFP-QAPP is followed, proper sampling techniques, preservation, and handling are used, proper analytical procedures are followed, and holding times for the samples are not exceeded in the laboratory.

Completeness. Completeness is a measure of the amount of usable data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. It is expected that the laboratory used for this project will provide data that meet the QC acceptance criteria for 90 percent, or more, of all samples analyzed. Following the completion of the analytical testing, the percent completeness will be calculated using the following equation:

$$\%C = \left(\frac{V}{N}\right) \times 100$$

Where: V = number of measurements judged valid
N = total number of sample results

The data review process will be used to determine the quality and quantity of usable analytical data generated.

The completeness acceptance criterion for samples collected in the field will be 90 percent of the quantity of samples planned for collected in the UFP-QAPP. Corrective action may be implemented to recollect samples where necessary and possible (e.g., modifying a planned sample location, sample jars broken during shipment). Laboratory notification of sample receipt conditions will be used to determine, as soon as possible, whether any problems during sample shipment would necessitate recollection of samples.

Comparability. Comparability expresses the confidence with which one data set can be compared to another. The extent to which existing and planned analytical data will be comparable depends on the similarity of sampling and analytical methods. The procedures used to obtain the planned analytical data are expected to provide comparable data. The procedures used will be USEPA promulgated methods, well recognized and commonly used for environmental investigations.

Desired Method Sensitivity. Depending upon the use to the data and the type of test parameter, specific quantitation limits (QLs) will be required. Worksheet #15 lists the required QLs. In each case, the QLs are well below the project action levels which are also listed or referenced.

QAPP Worksheet #12-1
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	Metals, Cyanide
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	Data Quality Indicators (DQIs)	Measurement Performance Criteria (MPC)	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	SW846 6010C SW846 7471B SW846 9012	Accuracy	Recovery: 80-120%	Matrix Spike (MS)	A
		Precision	RPD: ≤20%	Laboratory Duplicate	A
		Accuracy	Recovery: 80-120%	Laboratory Control Sample (LCS)	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ reporting limit (RL) and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Sensitivity, Accuracy	No analytes detected > limit of detection (LOD)	Calibration Blank	A
		Accuracy	ICS-A: Absolute value of concentration for all non-spiked analytes <LOD ICS-AB: within ±20% of true value	Interference Check Sample (ICS; method SW846 6010C only)	A
		Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample	Serial Dilution	A
		Accuracy	Recovery: 75-125%	Post-Digestion Spike (PDS; method SW846 6010C only)	A
		Accuracy	Recovery: 85-115%	Recovery Test (method SW846 7471B only)	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-2
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	VOCs, Semi-Volatile Organic Compounds (SVOCs), Pesticides, PCBs
Concentration Level	Trace (VOCs,), Low (SVOCs, Pesticides, PCBs)

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	SW846 8260B SW846 8270D SW846 8081B SW846 8082A	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/Matrix Spike Duplicate (MSD)	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Surrogate Spikes	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-3
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	Radiological Parameters
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	HASL-300 (or equivalent gamma spectroscopy method)	Precision	NAD≤3.92	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Sensitivity	≤RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-4
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP Metals (solid waste characterization to also include copper, nickel, and zinc)
Concentration Level	Low to Medium

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 6010C SW846 7470A	Accuracy	Recovery: 80-120%	MS	A
		Precision	RPD: ≤20%	Laboratory Duplicate	A
		Accuracy	Recovery: 80-120%	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Sensitivity, Accuracy	No analytes detected > LOD	Calibration Blank	A
		Accuracy	ICS-A: Absolute value of concentration for all non-spiked analytes <LOD ICS-AB: within ±20% of true value	ICS (method SW846 6010C only)	A
		Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample	Serial Dilution	A
		Accuracy	Recovery: 75-125%	PDS (method 846 6010C only)	A
		Accuracy	Recovery: 85-115%	Recovery Test (method SW846 7471B only)	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-5
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, PCBs
Concentration Level	Low to High

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 8082A	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/MSD	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Surrogate Spikes	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-6
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Reactivity (Sulfide and Cyanide)
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheets #17-2 and #17-3	SW846 Section 7.3.3.2 and 9012	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
	SW846 Section 7.3.4.2 and 9034	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-7
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Ignitability
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 1010	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-8
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	pH[1]
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 9045D SW846 9040C	Sensitivity	Must agree within ±0.10 pH unit of true value	Initial Calibration Verification	A
		Sensitivity	±0.05 pH unit of the temperature adjusted pH value	Continuing Calibration Verification	A
		Precision	Must agree within ±0.10 pH units	Laboratory Duplicate	S&A
		Accuracy	4±2°C	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis for solid waste characterization will be performed on both the solid material and the TCLP extract.

QAPP Worksheet #12-9
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Oil and Grease[1]
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	EPA 1664A	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/MSD	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on both the solid material and the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-10
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Ammonia-Nitrogen[1]
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM 4500NH3 D	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-11
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Chemical Oxygen Demand (COD)[1]
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM5220D	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-12
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Total Volatile Solids
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM2540G	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-13
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Total Solids[1]
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM2540B	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Precision	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
		Sensitivity	All target compounds ≤ RL	Method Blank	A
		Accuracy	4±2°C	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-14
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Free Liquids
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SW846 9095	Accuracy	4±2°C	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

QAPP Worksheet #13
Secondary Data Criteria and Limitations Table

Secondary Data	Data Source (Originating Organization, Report Title, and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used	Limitations on Data Use
Specifications and Drawings	Arcadis/Malcolm Pirnie, 2012	Arcadis/Malcolm Pirnie	Historical data that will define the limits of the soil excavations	None for the current intended project objectives
Historical Data	USEPA Region II, September 2003. "Record of Decision" Cornell-Dubilier Electronics Superfund Site, OU-1, South Plainfield, New Jersey.	Foster Wheeler Environmental Corporation, August 2001. "Final Remedial Investigation Report for Operable Unit 1 (OU-1) Offsite Soils, for Cornell-Dubilier Electronics Superfund Site, South Plainfield, Middlesex County, New Jersey." Foster Wheeler Environmental Corporation, August 2001. "Final Feasibility Study Report for Operable Unit 1 (OU-1) Offsite Soils, for Cornell-Dubilier Electronics Superfund Site, South Plainfield, Middlesex County, New Jersey."	Historical data that will define the limits of the soil excavations	None for the current intended project objectives

QAPP Worksheet #14
Summary of Project Tasks

Sampling Tasks: Samples will be collected for analytical parameters from the locations described in Worksheets #17 and #18 per the instructions in Worksheet #17. The following list represents the types of samples to be collected during the course of field activities:

- **Offsite Topsoil/Backfill Sampling.** Backfill material obtained from offsite sources will be tested for chemical parameters prior to use in order to determine that the materials do not present a threat to human health and/or the environment.
- **Solid Waste Characterization Sampling.** Waste characterization samples will be collected from excavated soil and debris for waste characterization and disposal facility approval. More specific information on solid waste disposal can be found in the Transportation and Disposal Plan, submitted under separate cover.
- **Wastewater Characterization Sampling.** Wastewater generated during site activities (e.g., decontamination water, storm water) will be containerized in an aboveground storage tank and samples will be collected to determine the waste management approach.

Analysis Tasks: Analytical methodologies are described in Worksheets #19 and #23. The following list represents the analysis required for each sample type to be collected during the course of field activities:

- **Offsite Topsoil/Backfill Sampling.** Laboratory analysis will be performed on these samples for metals, cyanide, VOCs, SVOCs, pesticides, PCBs, and radiological parameters, according to NJAC 7:26D (November 2009) and NJAC 7:26E (May 2012).
- **Solid Waste Characterization Sampling.** Materials will be disposed of at a disposal facility located in Pennsylvania; therefore, laboratory analysis will be performed to meet the requirements of the Pennsylvania Department of Environmental Protection, Bureau of Waste Management, Form U. At a minimum, laboratory analysis will be performed on these samples for corrosivity, ignitability, hydrogen cyanide reactivity, hydrogen sulfide reactivity, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, total PCBs, total solids, total volatile solids, oil and grease, ammonia-nitrogen, COD, and free liquids. Additional analyses may be performed at the direction of the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.
- **Wastewater Characterization Sampling.** Laboratory analysis will be performed on these samples for corrosivity, ignitability, hydrogen cyanide reactivity, hydrogen sulfide reactivity, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, and total PCBs. Additional analyses may be performed at the direction of the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.

Quality Control Tasks: The analytical laboratories will be required to analyze QC samples listed in the documents and procedures give in Worksheet #28. Laboratory analytical data will undergo internal reviews and validation prior to release of the analytical data reports and EDDs. Sevenson will also review laboratory analytical data as described in Worksheets #31 and #36.

In addition, the field sampling team will be required undergo internal QC assessments, including review of field sampling activities, documentation, and health and safety compliance as described in Worksheet #31.

Secondary Data: Reports and analytical data associated with prior investigations are defined in Worksheet #13. These documents have been reviewed by Sevenson and their contents utilized in the development of the UFP-QAPP for the current scope of work.

Data Management Tasks: Both hard copy and electronic data deliverables will be tracked, stored, handled, and managed. All data, field notes, and analytical information will be placed in an electronic database which will be maintained in the Sevenson corporate office. All electronic data will be backed up. Hardcopies of data will be stored in project files.

Documentation and Records: All hardcopy data (e.g., field notebooks, photos, hard copies of chain of custody forms, airbills, etc.) will be taken to the Sevenson corporate office and kept in the project files.

Assessment/Audit Tasks: Planned project assessments are defined in Worksheet #31. Audits of field staff compliance with project standard operating procedures (SOPs) will be performed within the first week of sample collection and periodically thereafter as determined by the Project CQCSM or the field team leader. Checklists used during field audits, including task-specific quality control checklists, are included in Appendix 5. Audits of laboratory compliance with SOPs will be performed on a periodic basis as determined by the laboratory QA manager. In addition, laboratory data will be audited as part of the data validation process as defined in this UFP-QAPP. The laboratory may be audited onsite by Sevenson at any time based on need determined by the Sevenson project chemist.

Subcontracted laboratories will maintain current requirements for certification required by NJDEP and DOD ELAP.

Data Review Tasks: Chemical data that is generated will be reviewed by Sevenson against the criteria in the applicable analytical SOP. See also Worksheets #23, #28, #35, and #36.

Data review by Sevenson will include, but may not be limited to, the following parameters:

- Data completeness
- Holding time
- Laboratory control samples
- Method blanks
- Surrogate spikes
- Matrix spike and matrix spike duplicates
- Laboratory and field duplicates

A QCSR will be provided to summarize the results of the data review findings and to present conclusions regarding the usability of the data for project objectives. The report will assess the accuracy, precision, representativeness, comparability, and completeness of the data generated. The report will focus on out of control data results and present a table of non-compliant results that exceeded some QC requirement.

QAPP Worksheet #15-1
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: VOCs
Concentration Level: Trace

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Acetone	67-64-1	70,000,000	10	NA	NA	3.5	5
Acrolein	107-02-8	500	500	NA	NA	5.1	25
Acrylonitrile	107-13-1	900	500	NA	NA	1.2	5
Benzene	71-43-2	2,000	5	NA	NA	0.86	5
Bromodichloromethane	75-27-4	1,000	5	NA	NA	1.1	5
Bromoform	75-25-2	81,000	5	NA	NA	1.4	5
Bromomethane	74-83-9	25,000	5	NA	NA	1.4	5
2-Butanone	78-93-3	3,100,000	10	NA	NA	2.8	5
Carbon Disulfide	75-15-0	7,800,000	500	NA	NA	0.66	5
Carbon Tetrachloride	56-23-5	600	5	NA	NA	1.1	5
Chlorobenzene	108-90-7	510,000	5	NA	NA	0.96	5
Chloroethane	75-00-3	220,000	5	NA	NA	1.7	5
Chloroform	67-66-3	600	5	NA	NA	0.82	5
Chloromethane	74-87-3	4,000	5	NA	NA	0.74	5
Dibromochloromethane	124-48-1	3,000	5	NA	NA	0.77	5
1,2-Dibromo-3-chloropropane	96-12-8	80	5	NA	NA	0.67	5
1,2-Dibromoethane	106-93-4	8	5	NA	NA	1.5	5
1,2-Dichlorobenzene	95-50-1	5,300,000	5	NA	NA	0.44	5
1,3-Dichlorobenzene	541-73-1	5,300,000	5	NA	NA	0.30	5
1,4-Dichlorobenzene	106-46-7	5,000	5	NA	NA	0.25	5
Dichlorodifluoromethane	75-71-8	490,000	5	NA	NA	3.6	5
1,1-Dichloroethane	75-34-3	8,000	5	NA	NA	0.94	5
1,2-Dichloroethane	107-06-2	900	5	NA	NA	0.9	5
1,1-Dichloroethene	75-35-4	11,000	5	NA	NA	0.98	5
cis-1,2-Dichloroethene	156-59-2	230,000	5	NA	NA	1.2	5
trans-1,2-Dichloroethene	156-60-5	300,000	5	NA	NA	1.1	5

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
1,2-Dichloropropane	78-87-5	2,000	5	NA	NA	1.2	5
1,3-Dichloropropene (cis and trans)	10061-01-5 (cis) 10061-02-6 (trans)	2,000	5	NA	NA	0.62 (cis) 1 (trans)	5 (cis) 5 (trans)
Ethylbenzene	100-41-4	7,800,000	5	NA	NA	1.2	5
Methyl Acetate	79-20-9	78,000,000	5	NA	NA	1.4	5
Methylene Chloride	75-09-2	34,000	5	NA	NA	0.64	5
Methyl tert-butyl ether	1634-04-4	110,000	5	NA	NA	0.77	5
Styrene	100-42-5	90,000	5	NA	NA	1.1	5
Tertiary Butyl Alcohol	75-65-0	1,400,000	100	NA	NA	5	10
1,1,2,2-Tetrachloroethane	79-34-5	1,000	5	NA	NA	1.1	5
Tetrachloroethene	127-18-4	2,000	5	NA	NA	1.2	5
Toluene	108-88-3	6,300,000	5	NA	NA	0.54	5
1,2,4-Trichlorobenzene	120-82-1	73,000	5	NA	NA	0.33	5
1,1,1-Trichloroethane	71-55-6	290,000	5	NA	NA	0.76	5
1,1,2-Trichloroethane	79-00-5	2,000	5	NA	NA	0.66	5
Trichloroethene	79-01-6	7,000	5	NA	NA	0.77	5
Trichlorofluoromethane	75-69-4	23,000,000	5	NA	NA	2.6	5
Vinyl Chloride	75-01-4	700	5	NA	NA	1	5
Xylenes (total)	1330-20-7	12,000,000	5	NA	NA	1.1	5

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).

[2] The project quantitation limits are based the soil practical quantitation limit (PQL) listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).

[3] Analytical method detection limits (MDLs) and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-2
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: SVOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Acenaphthene	83-32-9	3,400,000	200	NA	660	8.4	170
Acenaphthylene	208-96-8	NS	200	NA	660	10	170
Acetophenone	98-86-2	2,000	200	NA	ND	20	170
Anthracene	120-12-7	17,000,000	200	NA	660	19	170
Atrazine	1912-24-9	210,000	200	NA	ND	24	170
Benzaldehyde	100-52-7	6,100,000	200	NA	ND	49	170
Benzidine	92-87-5	700	700	NA	NA	61	170
Benzo(a)anthracene	56-55-3	600	200	NA	660	17	170
Benzo(a)pyrene	50-32-8	200	200	NA	660	25	170
Benzo(b)fluoranthene	205-99-2	600	200	NA	660	46	170
Benzo(g,h,i)perylene	191-24-2	380,000,000	200	NA	660	17	170
Benzo(k)fluoranthene	207-08-9	6,000	200	NA	660	19	170
1,1'-Biphenyl	92-52-4	3,100,000	200	NA	ND	17	170
Bis(2-chloroethyl)ether	111-44-4	400	200	NA	660	74	170
Bis(2-chloroisopropyl)ether	108-60-1	23,000	200	NA	660	0.33	170
Bis(2-ethylhexyl)phthalate	117-81-7	35,000	200	NA	660	8.6	170
Butyl benzyl phthalate	85-68-7	1,200,000	200	NA	660	6.3	170
Caprolactam	105-60-2	31,000,000	200	NA	ND	25	170
Carbazole	86-74-8	24,000	200	NA	ND	10	170
2-Chlorophenol	95-57-8	310,000	200	NA	660	17	170
Chrysene	218-01-9	62,000	200	NA	660	25	170
Dibenzo(a,h)anthracene	53-70-3	200	200	NA	660	5.8	170
3,3'-Dichlorobenzidine	91-94-1	1,000	200	NA	1,300	52	170
2,4-Dichlorophenol	120-83-2	180,000	200	NA	660	17	170
Diethyl phthalate	84-66-2	49,000,000	200	NA	660	7.8	170
2,4-Dimethylphenol	105-67-9	1,200,000	200	NA	660	53	170
di-n-Butyl phthalate	84-74-2	6,100,000	200	NA	ND	5.8	170

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
4,6-Dinitro-2-methylphenol[4]	534-52-1	6,000	300	NA	3,300	30	330
2,4-Dinitrophenol[4]	51-28-5	120,000	300	NA	3,300	100	330
2,4-Dinitrotoluene	121-14-2	700	200	NA	660	6	170
2,6-Dinitrotoluene	606-20-2	700	200	NA	660	8.8	170
di-n-Octylphthalate	117-84-0	2,400,000	200	NA	ND	44	170
1,2-Diphenylhydrazine	122-66-7	700	700	NA	NA	170	330
Fluoranthene	206-44-0	2,300,000	200	NA	660	18	170
Fluorene	86-73-7	2,300,000	200	NA	660	7.8	170
Hexachlorobenzene	118-74-1	300	200	NA	660	7.9	170
Hexachlorobutadiene	87-68-3	6,000	200	NA	660	32	170
Hexachlorocyclopentadiene	77-47-4	45,000	200	NA	660	32	170
Hexachloroethane	67-72-1	35,000	200	NA	660	96	170
Indeno(1,2,3-cd)pyrene	193-39-5	600	200	NA	660	8.9	170
Isophorone	78-59-1	510,000	200	NA	660	51	170
2-Methylnaphthalene	91-57-6	230,000	170	NA	660	20	170
2-Methylphenol	95-48-7	310,000	200	NA	660	23	170
4-Methylphenol	106-44-5	31,000	200	NA	660	22	170
Naphthalene	91-20-3	6,000	200	NA	660	23	170
2-Nitroaniline[4]	88-74-4	39,000	300	NA	3,300	5.5	330
Nitrobenzene	98-95-3	31,000	200	NA	660	18	170
N-Nitrosodimethylamine	62-75-9	700	700	NA	NA	36	170
N-Nitroso-di-n-propylamine	621-64-7	200	200	NA	660	68	170
N-Nitrosodiphenylamine	86-30-6	99,000	200	NA	660	47	170
Pentachlorophenol[4]	87-86-5	3,000	300	NA	3,300	82	330
Phenanthrene	85-01-8	NS	200	NA	660	6.9	170
Phenol	108-95-2	18,000,000	200	NA	660	29	170
Pyrene	129-00-0	1,700,000	200	NA	660	7.4	170
2,4,5-Trichlorophenol[4]	95-95-4	6,100,000	200	NA	660	53	330
2,4,6-Trichlorophenol	88-06-2	19,000	200	NA	660	26	170

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009). "NS" indicates that there is no criterion listed for the analyte.

[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).

[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-3
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Pesticides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8081B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Aldrin	309-00-2	40	2	NA	NA	0.15	1.7
Chlordane (alpha and gamma)	57-74-9	200	2	NA	NA	0.12 (alpha-) 0.11 (gamma-)	1.7 (alpha-) 1.7 (gamma-)
4,4'-DDD[4]	72-54-8	3,000	3	NA	NA	0.28	3.3
4,4'-DDE[4]	72-55-9	2,000	3	NA	NA	0.24	3.3
4,4'-DDT[4]	50-29-3	2,000	3	NA	NA	0.25	3.3
Dieldrin[4]	60-57-1	40	3	NA	NA	0.24	3.3
Endosulfan I and Endosulfan II[4]	115-29-7	470,000	3	NA	NA	0.035 (-I) 0.089 (-II)	1.7 (-I) 3.3 (-II)
Endosulfan sulfate[4]	1031-07-8	470,000	3	NA	NA	0.23	3.3
Endrin[4]	72-20-8	23,000	3	NA	NA	0.25	3.3
Alpha-BHC	319-84-6	100	2	NA	NA	0.11	1.7
Beta-BHC	319-85-7	400	2	NA	NA	0.13	1.7
Heptachlor	76-44-8	100	2	NA	NA	0.11	1.7
Heptachlor epoxide	1024-57-3	70	2	NA	NA	0.11	1.7
Gamma-BHC	58-89-9	400	2	NA	NA	0.11	1.7
Methoxychlor	72-43-5	390,000	20	NA	NA	2.2	17
Toxaphene	8001-35-2	600	200	NA	NA	5.5	170

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-4
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: PCBs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits[4]	
				MDLs (µg/Kg)	Method QLs (µg/Kg)[3]	MDLs (µg/Kg)	QLs (µg/Kg)
Aroclor 1016	12674-11-2	200	30	0.057-0.070	38-47	2.5	33
Aroclor 1221	11104-28-2			0.057-0.070	38-47	12	33
Aroclor 1232	11141-16-5			0.057-0.070	38-47	1.9	33
Aroclor 1242	53469-1-9			0.057-0.070	38-47	1.7	33
Aroclor 1248	12672-29-6			0.057-0.070	38-47	3.8	33
Aroclor 1254	11097-69-1			0.057-0.070	38-47	1.9	33
Aroclor 1260	11096-82-5			0.057-0.070	38-47	2.1	33

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical MDLs and QLs are those documented in validated methods. Per SW-846 Method 8082, the Estimated Quantitation Limit is the MDL times a factor (use 670 for low-concentration soil).
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-5
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Metals and Cyanide
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (mg/Kg)[1]	Project Quantitation Limit Goal (mg/Kg)[2]	SW-846 6010C/7471B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/Kg)	Method QLs (mg/Kg)	MDLs (mg/Kg)	QLs (mg/Kg)
Aluminum	7429-90-5	78,000	20	NA	NA	1.2	10
Antimony	7440-36-0	31	6	NA	NA	0.18	1
Arsenic	7440-38-2	19	1	NA	NA	0.16	1
Barium	7440-39-3	16,000	20	NA	NA	0.38	10
Beryllium	7440-41-7	16	0.5	NA	NA	0.002	0.25
Cadmium	7440-43-9	78	0.5	NA	NA	0.013	0.25
Chromium	7440-47-3	240	2	NA	NA	0.054	1
Cobalt	7440-48-4	1,600	5	NA	NA	0.035	2.5
Copper	7440-50-8	3,100	3	NA	NA	0.42	1.5
Cyanide	57-12-5	1,600	3	NA	NA	NA	2.5
Lead	7439-92-1	400	1	NA	NA	0.14	0.5
Manganese[4]	7439-96-5	11,000	2	NA	NA	0.47	2.5
Mercury	7439-97-6	23	0.1	NA	NA	0.0048	0.033
Nickel	7440-02-0	1,600	4	NA	NA	0.066	2.5
Selenium	7782-49-2	390	4	NA	NA	0.78	1.5
Silver[4]	7440-22-4	390	1	NA	NA	0.079	1.5
Thallium	7440-28-0	5	3	NA	NA	0.24	1
Vanadium	7440-62-2	78	5	NA	NA	0.038	2.5
Zinc	7440-66-6	23,000	6	NA	NA	0.27	2.5

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-6
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Radiological Parameters
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (pCi/g)[1]	Project Quantitation Limit Goal (pCi/g)	HASL-300 (or equivalent gamma spectroscopy method)			
				Analytical Method[2]		Achievable Laboratory Limits	
				MDLs (pCi/g)	Method QLs (pCi/g)	MDLs (pCi/g)	QLs (pCi/g)[3]
Ac-228	14331-83-0	NA[4,7]	1	NA	NA	NA	1
Th-232	7440-29-1	2	1	NA	NA	NA	1
Bi-214	14733-03-0	NA[5,7]	1	NA	NA	NA	1
Pb-214	15067-28-4	NA[5,7]	1	NA	NA	NA	1
Ra-226	13982-63-3	2	1	NA	NA	NA	1
Th-234	15065-10-8	NA[6,7]	1	NA	NA	NA	1
U-238	24678-82-8	14	1	NA	NA	NA	1

[1] Project action limits obtained from NJAC 7:28-12 (2008).
[2] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and method QLs are not provided in the most recent version of the method for the parameters and matrices of interest.
[3] The achievable laboratory limit is based on the highest expected minimum detectable activity (MDA). MDAs are calculated by the laboratory for each sample analyzed.
[4] The Ac-228 result will be reported by the laboratory and will be used to quantitate the Th-232 activity. There is no action limit listed in NJAC 7:28-12 for Ac-228.
[5] The Bi-214 and Pb-214 results will be reported by the laboratory and will be used to quantitate the Ra-226 activity. There are no action limits listed in NJAC 7:28-12 for Bi-214 and Pb-214.
[6] The Th-234 result will be reported by the laboratory and will be used to quantitate the U-238 activity. There is no action limit listed in NJAC 7:28-12 for Th-234.
[7] Uranium, thorium, and radium decay chain daughter isotopes are assumed to be in secular equilibrium with the parent isotope.

QAPP Worksheet #15-7
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Metals
Concentration Level: Low to Medium

Analyte[1]	CAS Number	Project Action Limit (mg/L)[2]	Project Quantitation Limit Goal (mg/L)[3]	SW-846 6010C/7470A			
				Analytical Method[4]		Achievable Laboratory Limits	
				MDLs (mg/L)	Method QLs (mg/L)	MDLs (mg/L)	QLs (mg/L)
Arsenic	7440-38-2	5.00	0.5	NA	NA	0.0053	0.02
Barium	7440-39-3	100.00	10	NA	NA	0.0085	0.20
Cadmium	7440-43-9	1.00	0.1	NA	NA	0.00014	0.005
Chromium	7440-47-3	5.00	0.5	NA	NA	0.0011	0.02
Lead	7439-92-1	5.00	0.5	NA	NA	0.0022	0.01
Mercury	7439-97-6	0.20	0.02	NA	NA	0.000016	0.0002
Selenium	7782-49-2	1.00	0.1	NA	NA	0.0066	0.03
Silver	7440-22-4	5.00	0.5	NA	NA	0.00059	0.03
Copper	7440-50-8	NS	-	NA	NA	0.0036	0.03
Nickel	7440-02-0	NS	-	NA	NA	0.00085	0.05
Zinc	7440-66-6	NS	-	NA	NA	0.0049	0.05

[1] Copper, nickel, and zinc are only required for solid waste characterization samples.
[2] Project action limits are based upon RCRA. This information will be used for disposal. NS indicates that there is no criterion listed for the analyte.
[3] The project quantiation limits are based upon one-tenth of the RCRA limits.
[4] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-8
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP VOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Benzene	71-43-2	500	50	NA	NA	0.12	5.0
2-Butanone	78-93-3	200,000	20,000	NA	NA	2.0	5.0
Carbon Tetrachloride	56-23-5	500	50	NA	NA	0.11	5.0
Chlorobenzene	108-90-7	100,000	10,000	NA	NA	0.23	5.0
Chloroform	67-66-3	6,000	600	NA	NA	0.30	5.0
1,2-Dichloroethane	107-06-2	500	50	NA	NA	0.16	5.0
1,1-Dichloroethene	75-35-4	700	70	NA	NA	0.64	5.0
Tetrachloroethene	127-18-4	700	70	NA	NA	0.27	5.0
Trichloroethene	79-01-6	500	50	NA	NA	0.25	5.0
Vinyl Chloride	75-01-4	200	20	NA	NA	0.78	5.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-9
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP SVOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Cresols[4]	95-48-7 (2-methylphenol) 106-44-5 (4-methylphenol)	200,000	20,000	NA	NA	1.20 (2-) 1.10 (4-)	33.0 (2-) 33.0 (4-)
1,4-Dichlorobenzene	106-46-7	7,500	750	NA	NA	0.63	33.0
2,4-Dinitrotoluene[5]	121-14-2	130	13	NA	NA	1.10	33.0
Hexachlorobenzene[5]	118-74-1	130	13	NA	NA	0.96	33.0
Hexachlorobutadiene	87-68-3	500	50	NA	NA	0.70	33.0
Hexachloroethane	67-72-1	3,000	300	NA	NA	0.73	33.0
Nitrobenzene	98-95-3	2,000	200	NA	NA	0.90	33.0
Pentachlorophenol	87-86-5	100,000	10,000	NA	NA	0.72	66.0
Pyridine	110-86-1	5,000	500	NA	NA	0.86	33.0
2,4,5-Trichlorophenol	95-95-4	400,000	40,000	NA	NA	0.76	66.0
2,4,6-Trichlorophenol	88-06-2	2,000	200	NA	NA	0.91	33.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] Total cresols are reported as 2-methylphenol and 4-methylphenol. The sum of these results equals total cresols. The analytical result reported for 4-methylphenol also includes the concentration for the 3-methylphenol isomer; these two isomers cannot be separated. 3-Methylphenol is not reported as a separate compound.
[5] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-10
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Pesticides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8081B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Chlordane	57-74-9	30	3	NA	NA	0.47	2.5
Endrin	72-20-8	20	2	NA	NA	0.011	0.10
Heptachlor	76-44-8	8	0.8	NA	NA	0.0031	0.05
Lindane (gamma-BHC)	58-89-9	400	40	NA	NA	0.0063	0.05
Methoxychlor	72-43-5	10,000	1,000	NA	NA	0.057	0.50
Toxaphene	8001-35-2	500	50	NA	NA	1.7	5.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-11
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Herbicides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8151A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
2,4-D	94-75-7	10,000	1,000	NA	NA	0.037	3.3
2,4,5-TP	93-72-1	1,000	100	NA	NA	0.02	0.33

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-12
Reference Limits and Evaluation Table

Matrix: Solid Waste Characterization
Analytical Group: PCBs
Concentration Level: Low to High

Analyte	CAS Number	Project Action Limit (mg/Kg)[1]	Project Quantitation Limit Goal (mg/Kg)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/Kg)	Method QLs (mg/Kg)[3]	MDLs (mg/Kg)	QLs (mg/Kg)
Aroclor 1016	12674-11-2	50	5	0.057-0.070	38-47	0.0047	0.033
Aroclor 1221	11104-28-2			0.057-0.070	38-47	0.0028	0.033
Aroclor 1232	11141-16-5			0.057-0.070	38-47	0.0047	0.033
Aroclor 1242	53469-1-9			0.057-0.070	38-47	0.0045	0.033
Aroclor 1248	12672-29-6			0.057-0.070	38-47	0.0049	0.033
Aroclor 1254	11097-69-1			0.057-0.070	38-47	0.0020	0.033
Aroclor 1260	11096-82-5			0.057-0.070	38-47	0.0062	0.033

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. Per SW-846 Method 8082, the Estimated Quantitation Limit is the MDL times a factor (use 670 for low-concentration soil).

QAPP Worksheet #15-13
Reference Limits and Evaluation Table

Matrix: Liquid Waste Characterization
Analytical Group: PCBs
Concentration Level: Low to High

Analyte	CAS Number	Project Action Limit (mg/L)[1]	Project Quantitation Limit Goal (mg/L)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/L)	Method QLs (mg/L)[3]	MDLs (mg/L)	QLs (mg/L)
Aroclor 1016	12674-11-2	50	5	NA	NA	0.00012	0.001
Aroclor 1221	11104-28-2			NA	NA	0.00012	0.001
Aroclor 1232	11141-16-5			NA	NA	0.00019	0.001
Aroclor 1242	53469-1-9			NA	NA	0.000095	0.001
Aroclor 1248	12672-29-6			NA	NA	0.00015	0.001
Aroclor 1254	11097-69-1			NA	NA	0.000056	0.001
Aroclor 1260	11096-82-5			NA	NA	0.00016	0.001

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-14
Reference Limits and Evaluation Table

Matrix: Solid Waste Characterization
Analytical Group: RCRA Characteristics and Pennsylvania Form U Required Parameters
Concentration Level: NA; Low

Analyte	CAS Number	Project Action Limit[1]	Project Quantitation Limit Goal[2]	Analytical Method[3]		Achievable Laboratory Limits	
				MDLs	Method QLs	MDLs	QLs
pH	NA	2-12.5	0.01 pH units	NA	NA	NA	0.1 pH units
Ignitability	10-36-6	Flashpoint <140°F	NA	NA	NA	NA	Report to nearest 1°F
Reactive Cyanide	57-12-5	100mg/Kg	10mg/Kg	NA	NA	NA	1mg/Kg
Reactive Sulfide	18496-25-8	500mg/Kg	50mg/Kg	NA	NA	NA	1mg/Kg
Oil and Grease	NA	Solid: NS TCLP Extract: 88,550mg/L	Solid: - TCLP Extract: 8,855mg/L	NA	NA	Solid: 33mg/Kg TCLP extract: 1.2mg/L	Solid: 170mg/Kg TCLP extract: 5.0mg/L
Ammonia-Nitrogen	7664-41-7	111,111mg/L	11,111mg/L	NA	NA	NA	0.2mg/L
COD	NA	NS	-	NA	NA	NA	30mg/L
Total Volatile Solids	NA	NS	-	NA	NA	NA	1%
Total Solids	NA	NS	-	NA	NA	NA	10mg/L
Free Liquids	NA	No free liquids	NA	NA	NA	NA	NA

[1] Project action limits are based upon Pennsylvania Form U. This information will be used for disposal. "NS" indicates that there is no criterion listed for the analyte.
[2] The project quantitation limits are based upon one-tenth of the project action limit.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and method QLs are not provided in the most recent version of the method for the parameters and matrices of interest.

QAPP Worksheet #16
Project Schedule/Timeline Table

Activities	Organization	Dates		Deliverable	Deliverable Due Date
		Anticipated Date(s) of Initiation	Anticipated Date of Completion		
Planning and development of data quality objectives	Sevenson	Completed	Completed	Data Quality Objectives	May 2012
Development of the sampling rationale	Sevenson	Completed	Completed	UFP-QAPP	Revision 0: May 2012 Revision 1: July 2012
Preparation of the UFP-QAPP	Sevenson	Completed	Completed	UFP-QAPP	Revision 0: May 2012 Revision 1: July 2012
Collection of soil samples and submission for analysis – waste characterization, offsite backfill	Sevenson	Summer 2012	Winter 2012/2013	Sample collected per UFP-QAPP	NA
Collection of water samples and submission for analysis – waste characterization	Sevenson	Summer 2012	Winter 2012/2013	Samples collected per UFP-QAPP	NA
Laboratory data analyses review and verification of data	Sevenson	Autumn 2012	Spring 2013	Quality Control Summary Report	Within 45 days after receipt of the last laboratory data report

Note: The project schedule is continually being updated and submitted to the USACE; please refer to the individual submittals of the project schedule for the up-to-date timetable.

QAPP Worksheet #17-1
Sampling Design and Rationale – Offsite Backfill Sampling

As necessary over the duration of the project, backfill material consisting of common fill and standard topsoil will be obtained from offsite sources. Samples of backfill materials will be analyzed to confirm that they are free from chemical contamination as defined in N.J.A.C. 7:26D and NORM as defined in N.J.A.C 7:28-12.

Offsite backfill materials will be acquired from local, USACE-approved, borrow sources. The backfill material will meet the requirements described in Section 02320 of the project specification and the requirements defined in the NJDEP Soil Cleanup Criteria. The fill material will be sampled and analyzed to verify that the soil is clean for the intended use. Documentation certifying that all criteria have been met for offsite backfill will be forwarded to the USACE prior to bringing any material to the site.

A minimum of one sample per every 5,000yd^3 of backfill material, and no less than one sample per borrow area will be collected. Additional samples may be collected and analyzed as requested by the USACE. The sample location is determined when the facility point of contact identifies which pile of backfill material will be used for the site.

Backfill material samples will be analyzed for VOCs, SVOCs, pesticides, PCBs, metals, cyanide, and radiological parameters. The results of these analyses will be compared to the NJDEP RDCSRS and N.J.A.C. 7:28-12, Table 1A (see Worksheets #15-1 through #15-6). Sample results exceeding criteria will be considered unacceptable as topsoil or backfill.

Backfill samples will be analyzed on a five day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this UFP-QAPP. Field duplicates will not be collected. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

VOC samples will be collected using five-gram En-Core™ samplers and the spade and trowel method will be used for all other parameters. With the spade and trowel method, the top layer of soil to desired sample depth is removed with a dedicated, pre-cleaned spade. A dedicated, pre-cleaned trowel is then used to collect samples from the desired depth (i.e., at a minimum from the top six inches of soil). VOC samples will be collected as grab samples and samples for all other parameters will be collected as five-point composites. Soil samples for laboratory analysis will be collected in the appropriate containers identified in Worksheet #19. The order of collection for analytical parameters will be organics and then metals. To maintain integrity of the collected samples, preservation techniques should include refrigeration and protection from light, and the sample jars should be closed immediately after filling and placed on ice.

Samples for VOC analysis will be collected as follows:

- Gloves will be donned immediately prior to sampling and a pair of new gloves will be worn each time a different location is sampled.
- The sample collection process should be completed in a minimal amount of time with the least amount of disruption as possible. Rough trimming of the sampling location surface layer should be considered if the material may have already lost VOCs (e.g., been exposed for more than a few minutes) or if other waste, different soil strata, or vegetation may have contaminated it. Surface layers can be removed by scraping the surface using a clean spade.
- Insert the clean coring tool into a fresh surface for sample collection. Take care not to trap air behind the sample. An undisturbed sample is collected by pushing the barrel of the coring tool into a freshly exposed surface and removing the corer once it is filled.
- The exterior of the barrel should be quickly wiped with a clean disposable towel to ensure a tight seal and the cap snapped on the open end.

Samples for all other analyses will be collected as follows:

- Gloves will be donned immediately prior to sampling and a pair of new gloves will be worn each time a different location is sampled.
- Using a disposable sample trowel, collect sufficient sample into a dedicated, disposable aluminum container from each of the five predetermined sample locations. The container must be large enough to hold more than the required volume and to allow proper mixing without spillage.
- Homogenization will be conducted using a decontaminated stainless steel spoon or spatula. The soil should be scraped from the sides, corners, and bottom, rolled into the middle of the bowl, and mixed. The soil should then be quartered (i.e., divided into four sections) and moved to the sides of the bowl. Each quarter should then be mixed individually, and then rolled to the center of the bowl and mixed with the entire sample again. These steps of quartering the sample, mixing individually, and then mixing the entire sample again should be repeated at least twice. The goal of the homogenization is to achieve a consistent physical appearance over the entire soil sample.
- Transfer the sample into laboratory cleaned sample jars using a clean decontaminated stainless steel spoon or spatula.
- Any leftover sample material will be placed back into the borrow area.

QAPP Worksheet #17-2
Sampling Design and Rationale – Solid Waste Characterization Sampling

As part of the site remediation, soils removed during remediation activities will be disposed of at an offsite disposal facility. Samples will be collected in-situ, prior to excavation activities, for waste characterization and disposal facility approval. The waste characterization samples will be analyzed by the subcontracted laboratory and the results will be sent to the offsite disposal facility for waste shipment approval. Waste characterization sample results will be compared against the disposal facility requirements.

Solid waste characterization samples will be analyzed for TCLP parameters (VOCs, SVOCs, pesticides, herbicides, and metals), total PCBs, RCRA characteristics (corrosivity, ignitability, reactive cyanide, and reactive sulfide), and Pennsylvania Form U parameters (oil and grease, ammonia-nitrogen, COD, total volatile solids, total solids, and free liquids). The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements; as of this writing, the offsite disposal facility has not been contracted and the specific requirements may vary. In addition to the full characterization samples, if deemed necessary by the Waste Disposal Coordinator or if required by the offsite disposal facility, additional samples may be collected and analyzed for only PCBs. All solid waste characterization samples will be shipped to the laboratory for analysis on a 5 day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this QAPP. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

Solid waste characterization samples will be collected in-situ prior to the initiation of excavation activities. Maps of the excavation areas and predetermined depths of excavation for the three remediation areas are included in Appendix 1. Large plots of the figures included in Appendix 1 are available onsite and should be referenced for all field activities. One full waste characterization sample will be collected from each proposed excavation area, with one sample collected for every 500yd^3 of excavated material in the larger property groupings. With the exception of TCLP VOC samples, the samples will be collected as five-point composites. The compositing procedure is designed to provide a representative sample of the waste material by combining materials collected from five discrete locations in the subsection of the excavation area. In order to prevent excess volatilization, TCLP VOC samples will be collected as a grab sample from one of the sample locations. Samples will be collected from the midpoint depth of the predetermined vertical limit of excavation (see Figures 1A, 2A, and 3A included in Appendix 1). It is anticipated that soil samples will be collected from each location using an auger or other soil coring device following the procedures included in the NJDEP Field Sampling Procedures Manual (NJDEP, 2005). The samples will be collected as follows:

- Gloves will be donned immediately prior to sampling and a clean pair of new disposable gloves will be worn each time a different location is sampled.
- Remove unnecessary twigs, rocks, and other non-soil materials from selected sampling point.
- Begin turning the auger with a clockwise motion and continue until the desired sampling depth is obtained.
- Use a second auger to collect the sample. Discard one-half inch of material in the top portion of the auger due to cave-in.
- Place the sample for VOC analysis directly into the required container, taking care to fill the container completely to limit headspace.
- Place the sample into a clean decontaminated stainless steel bowl to be homogenized. The bowl must be large enough to hold more that the required sample volume and to allow proper mixing without spillage.
- Collect the samples from the other four location using the auger as described above, placing each aliquot in the same stainless steel bowl.
- Homogenization will be conducted using a decontaminated stainless steel spoon or spatula. The soil should be scraped from the sides, corners, and bottom, rolled into the middle of the bowl, and

mixed. The soil should then be quartered (i.e., divided into four sections) and moved to the sides of the bowl. Each quarter should then be mixed individually, and then rolled to the center of the bowl and mixed with the entire sample again. These steps of quartering the sample, mixing individually, and then mixing the entire sample again should be repeated at least twice. The goal of the homogenization is to achieve a consistent physical appearance over the entire soil sample.

- Transfer the sample into laboratory cleaned sample jars using a clean decontaminated stainless steel spoon or spatula.
- Any leftover sample material will be placed back into the excavation area.

QAPP Worksheet #17-3
Sampling Design and Rationale – Liquid Waste Characterization Sampling

Liquid wastes generated during site activities, if any, will be containerized in an aboveground storage tank. At a minimum, one sample will be collected from each storage tank to determine the waste management approach. The sample results and the completed waste profile will be sent to the offsite disposal facility for waste shipment approval.

Liquid waste characterization samples will be analyzed for TCLP parameters (VOCs, SVOCs, pesticides, herbicides, and metals), total PCBs, and RCRA characteristics (corrosivity, ignitability, reactive cyanide, and reactive sulfide). Additional analytes may be required by the offsite disposal facility; the Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements. The samples will be shipped to the laboratory for analysis on a 5 day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this QAPP. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

Samples will be collected using dedicated, disposal polyvinyl chloride or Teflon bailers. The following sample procedure is consistent with NJDEP sampling instructions (NJDEP, 2005):

- Prepare the work area by placing plastic sheeting on the ground to avoid cross-contamination.
- Attach the bailer to cable or line for lowering. Polyethylene or nylon rope is recommended.
- Lower the bailer slowly until it contacts the water surface.
- Allow the bailer to sink and fill.
- Slowly raise the bailer to the surface. Do not allow the bailer line or bailer to contact the ground surface.
- Fill sample bottles by tipping bailer to allow slow discharge from the top to flow gently down the side of the sample bottle with minimal turbulence. If a bottom drain is present on the bailer, achieve a slow steady flow.
- Repeat as necessary to acquire sufficient volume to fill all sample containers.

QAPP Worksheet #18
Sampling Locations and Methods/SOP Requirements Table

Sampling Location/AOC	Matrix	Depth	Analytical Group	Concentration Level	Number of Samples (identify field duplicates)	Sampling SOP Reference	Rationale for Sampling Location
Offsite backfill and topsoil	Soil	At least 6 inches below surface	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	Approximately 2 samples (i.e., 1 backfill sample and 1 topsoil sample) No field duplicate samples required	Worksheet #17-1	Verify topsoil and backfill from offsite sources do not contain contaminant levels that are hazardous to human health or the environment
Waste characterization[1]	Soil	Midpoint[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides PCBs TCLP Metals Cyanide Reactivity Sulfide Reactivity Oil and Grease Ammonia-Nitrogen COD Total Volatile Solids pH Ignitability Total Solids Free Liquids	Low to High	Approximately 7 samples (i.e., 2 samples from Property 108/129/301/303; 1 sample from Property 116/302; 4 samples from Property 128/304/305) No field duplicate samples required	Worksheet #17-2	Characterize waste for proper disposal
Waste characterization	Soil	Midpoint[2]	PCBs	Low to High	Determined in the field and/or as requested by the offsite disposal facility No field duplicate samples required	Worksheet #17-2	Characterize waste for proper disposal

Sampling Location/AOC	Matrix	Depth	Analytical Group	Concentration Level	Number of Samples (identify field duplicates)	Sampling SOP Reference	Rationale for Sampling Location
Waste characterization[1]	Aqueous	NA	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides PCBs TCLP Metals Cyanide Reactivity Sulfide Reactivity pH Ignitability	Low to High	Determined in the field based on the amount of wastewater generated No field duplicate samples required	Worksheet #17-3	Characterize waste for proper disposal

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.
[2] Samples will be collected at the midpoint between the ground surface and the limit of excavation. Refer to the excavation plan drawings for each property group included in the Appendix 1.

QAPP Worksheet #19
Analytical SOP Requirements Table

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Offsite backfill	VOCs SVOCs Pesticide PCBs Metals Cyanide Radiological Parameters	Trace to Low	SW846 8260B SW846 8270D SW846 8081B SW846 8082A SW846 6010C/7471B SW846 9012B HASL-300 or equivalent gamma spectroscopy method	200 grams for extractable organics and metals; 2 different 5 gram aliquots for VOCs Gamma spectroscopy: fill Marinelli container (sample weight will vary based on density of material)	32oz. glass container for extractable organics and metals; 5 gram EnCore™ samplers and 4oz. glass container for VOCs; 32oz. glass containers for gamma spectroscopy	4°C±2°C; minimize headspace; none required for gamma spectroscopy	**VOCs:** Analyze within 14 days from date of collection **SVOCs, Pesticides, PCBs:** 14 days from date of collection to extraction and 40 days from extraction to analysis **Metals:** 180 days from date of collection to analysis; 28 days from date of collection to analysis for mercury **Cyanide:** 14 days from date of collection to analysis **Gamma Spectroscopy:** 180 days from date of collection to analysis

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Solid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide Oil and Grease Ammonia-nitrogen COD Total Volatile Solids Total Solids Free Liquids	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2 USEPA 1664A SM4500NH3 D SM5220D SM2540G SM2540B SW846 9095B	200 grams for extractable organics and metals; 25 grams for VOCs; 100 grams for RCRA characteristics; 400 grams for Pennsylvania Form U	32 oz. glass container for extractable organics and metals; 4oz. glass container for VOCs; 32oz. glass container for RCRA characteristics and Pennsylvania Form U	4°C±2°C; **VOCs:** zero headspace	**TCLP extraction** within 14 days for organics and within 180 days for metals (except mercury within 28 days); **Analysis of TCLP extracts:** *VOCs:* analysis within 14 days; *Extractable Organics (SVOCs, pesticides, herbicides):* extraction of leachate within 7 days and analysis within 40 days of extraction; *Metals:* analysis within 180 days (except mercury within 28 days); *Oil & Grease, Ammonia, Chemical Oxygen Demand:* analysis within 28 days **PCBs:** 14 days from date of collection to extraction and 40 days from extraction to analysis **pH, Ignitability, Reactive Sulfide, Total Volatile Solids, Total Solids:** 7 days from date of collection to analysis **Reactive Cyanide:** 14 days from date of collection to analysis **Oil & Grease, COD, Ammonia-Nitrogen:** 28 days from date of collection to analysis
Solid Waste Characterization	PCBs	Low to High	SW846 8082A	200 grams for extractable organics and	4oz. glass container	4°C±2°C	14 days from date of collection to extraction and 40 days from extraction to analysis

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Liquid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2	40mL for TCLP VOCs; 1L each for TCLP SVOCs, TCLP pesticides, TCLP herbicides, and PCBs; 500mL for TCLP metals; 100mL for pH; 250mL for ignitability; 1L for reactive cyanide; 500mL for reactive sulfide	2-40mL glass vial with Septa lined cap; 1L amber glass bottle each for TCLP SVOCs, TCLP pesticides, TCLP herbicides, and PCBs; 500mL plastic bottle for TCLP metals; 100mL plastic bottle for pH; 250mL glass bottle with Septa lined cap for ignitability; 1L plastic bottle for reactive cyanide; 500mL plastic bottle for reactive sulfide	4°C±2°C; **TCLP VOCs:** zero headspace/HCl to pH<2; **TCLP metals:** HNO_3 to pH<2; **reactive cyanide:** ascorbic NaOH to pH>12; **reactive sulfide:** zinc acetate NaOH to pH>9	**TCLP extraction** within 7 days for organics and within 180 days for metals (except mercury within 28 days); **Analysis of TCLP extracts:** *VOCs:* analysis within 14 days; *Extractable Organics (SVOCs, pesticides, herbicides):* extraction of leachate within 7 days and analysis within 40 days of extraction; *Metals:* analysis within 180 days (except mercury within 28 days) **PCBs:** 7 days from date of collection to extraction and 40 days from extraction to analysis **pH:** Immediately **Ignitability, Reactive Sulfide:** 7 days from date of collection to analysis **Reactive Cyanide:** 14 days from date of collection to analysis

[1] In some cases, multiple analyses can be taken from the same jar. Consult the laboratory for further instructions.
[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #20
Field Quality Control Sample Summary Table

Matrix	Analytical Group	Conc. Level	Analytical and Preparation SOP Reference	No. of Sampling Locations	No. of Field Duplicate Pairs	No. of MS/MSD	No. of Field Blanks	No. of Equip. Blanks	No. of Trip Blank Samples	Total No. of Samples to Lab
Offsite backfill and topsoil	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	SW846 8260B SW846 8270D SW846 8081B SW846 8082A SW846 6010C/7471B SW846 9012B HASL-300 or equivalent gamma spectroscopy method	One sample per 5,000yd^3 of backfill material and not less than one sample per borrow area for a total of approximately 2 samples.	0	0	0	0	0	2
Solid waste characterization[1]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide Oil and Grease Ammonia-nitrogen COD Total Volatile Solids Total Solids Free Liquids	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2 USEPA 1664A SM4500NH3 D SM5220D SM2540G SM2540B SW846 9095B	Approximately 7 samples (i.e., 2 samples from Property 108/129/301/303; 1 sample from Property 116/302; 4 samples from Property 128/304/305)	0	0	0	0	0	7
Solid waste characterization	PCBs	Low to High	SW846 8082A	Determined in the field and/or as requested by the offsite disposal facility	0	0	0	0	0	TBD

Matrix	Analytical Group	Conc. Level	Analytical and Preparation SOP Reference	No. of Sampling Locations	No. of Field Duplicate Pairs	No. of MS/MSD	No. of Field Blanks	No. of Equip. Blanks	No. of Trip Blank Samples	Total No. of Samples to Lab
iquid waste haracterization[1]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2	Determined in the field based on the amount of wastewater generated	0	0	0	0	0	TBD

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #21
Project Sampling SOP References Table

Reference Number	Title, Revision Date, and/or Number	Originating Organization	Equipment Type	Modified for Project Work? (Y/N)	Comments
NA	NJDEP Field Sampling Procedures Manual, August 2005	NJDEP	Sample collection and processing equipment	No	To be used by the field team as a guide to collecting samples. Sampling methodology included in Worksheet #17 is based on the procedures included in this manual. Specific sections to reference include 5.2.1.1 (liquid waste characterization), 6.2.7 (VOCs in soil), 6.2.8 (soil homogenization), and 6.6 (waste piles).

QAPP Worksheet #22
Field Equipment Calibration, Maintenance, Testing, and Inspection Table

Field Equipment	Calibration Activity	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Responsible Person	SOP Reference
No field sampling equipment is expected to be used during remediation activities.									

QAPP Worksheet #23
Analytical SOP References Table

Reference Number	Title, Revision Date, and/or Number	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work?
SW846 8081B	Organochlorine Pesticides by Gas Chromatography, Revision 2, February 2007	Definitive	Pesticides	Gas Chromatography with Electron Capture Detector (GC-ECD)	Spectrum	No
SW846 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography, Revision 1, February 2007	Definitive	PCBs	GC-ECD	Spectrum	No
SW846 8260B	Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 3, February 2007	Definitive	VOCs	Gas Chromatography/Mass Spectroscopy (GC/MS)	Spectrum	No
SW846 8270D	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007	Definitive	SVOCs	GC/MS	Spectrum	No
SW846 6010C	Inductively Coupled Plasma-Atomic Emission Spectrometry, Revision 3, February 2007	Definitive	Metals	Inductively Coupled Plasma (ICP)-Atomic Emission Spectrometry (AES)	Spectrum	No
SW846 7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique), Revision 1, September 1994	Definitive	Mercury	Cold Vapor Atomic Absorption (CVAA)	Spectrum	No
SW846 7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique), Revision 2, February 2007	Definitive	Mercury	CVAA	Spectrum	No
SW846 9012B	Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation), Revision 2, November 2004	Definitive	Cyanide	Distillation, Colorimetric	Spectrum	No
SW846 1010A	Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester, Revision 1, November 2004	Definitive	Ignitability	Pensky-Martens	Spectrum	No
SW846 8151A	Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization, Revision 1, December 1996	Definitive	Herbicides	GC-ECD	Spectrum	No

Reference Number	Title, Revision Date, and/or Number	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work?
SW846 Section 7.3.3.2	Reactive Sulfide Based on Section 7.3.3.2 of SW846	Definitive	Sulfide	Distillation, Redox	Spectrum	No
SW846 Section 7.3.4.2	Reactive Sulfide Based on Section 7.3.4.2 of SW846	Definitive	Cyanide	Distillation, Colorimeteric	Spectrum	No
SM2540G	Total, Fixed, and Volatile Solids in Solid and Semisolid Samples	Definitive	Total Volatile Solids	Analytical Balance	Spectrum	No
SW846 9045D	Soil and Waste pH, Revision 4, November 2004	Definitive	pH	pH Meter	Spectrum	No
SW846 9040C	pH by Electrometric Measurement, Revision 3, November 2004	Definitive	pH	pH Meter	Spectrum	No
HASL-300	Environmental Measurements Laboratory, Procedures Manual, 28th Edition	Definitive	Radiological Parameters	Gamma Spectrometer	Spectrum	No
USEPA 1664A	n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Treated n-Hexane Extractable Material (SGT-HEM; Non-Polar Material) by Extraction and Gravimetry	Definitive	Oil and Grease	Analytical Balance	Spectrum	No
SM5220D	The Determination of Chemical Oxygen Demand by Semi-Automated Colorimetry	Definitive	COD	Spectrophotometer	Spectrum	No
SM2540B	Total Residue (Gravimetric, Dried at 103-105 deg C)	Definitive	Total Solids	Analytical Balance	Spectrum	No
SM4500NH3 D	NH_3 Nitrogen, Ammonia	Definitive	Ammonia-Nitrogen	Ammonia Electrode	Spectrum	No
SW846 9095B	Paint Filter Liquid Test, Revision 2, November 2004	Definitive	Free Liquids	Paint Filter	Spectrum	No

QAPP Worksheet #24
Analytical Instrument Calibration Table

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/MS (VOC)	Bromofluorobenzene (BFB) tuning	Prior to initial calibration and calibration verification	Refer to criteria listed in the SOP	Retune instrument and verify	Laboratory analyst	SW846 8260B
	Initial calibration (minimum five points)	Prior to sample analysis or when calibration verification fails	% relative standard deviation (RSD) must be ≤15% for each compound. If %RSD >15%, determine best-fit curve: Linear regression correlation coefficient ≥0.995 or quadratic regression coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	
	System performance check	Once after each initial calibration and calibration verification	Response factor ≥0.10 for chloromethane, 1,1-dichloroethane, and bromoform; ≥0.30 for chlorobenzene and 1,1,2,2-tetrachloroethane	Correct the problem and repeat initial calibration.	Laboratory analyst	
	Continuing Calibration Verification (CCV)	At the start of each analytical sequence and every 12 hours thereafter	Response factor ≥0.10 for chloromethane, 1,1-dichloroethane, and bromoform; ≥0.30 for chlorobenzene and 1,1,2,2-tetrachloroethane. All other analytes within ±20% of expected value.	Correct the problem, then recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/MS (SVOC)	Decafluorotriphenylphosphine (DFTPP) tuning	Prior to initial calibration and calibration verification (every 12 hours)	Refer to criteria listed in the SOP	Retune instrument and verify	Laboratory analyst	SW846 8270D
	Initial calibration (minimum five points)	Prior to sample analysis or when calibration verification fails	%RSD must be ≤15% for each compound. If %RSD >15%, determine best-fit curve: Linear regression correlation coefficient ≥0.995 or quadratic regression coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	
	System performance check	Once after each initial calibration and calibration verification	Response factor ≥0.05 for N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol	Correct the problem and repeat initial calibration.	Laboratory analyst	
	CCV	At the start of each analytical sequence and every 12 hours thereafter	Response factor ≥0.05 for N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol. All other analytes within ±20% of expected value.	Correct the problem, then recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/ECD (pesticides, PCBs, herbicides)	Multipoint initial calibration for single response pesticides; multipoint calibration for multi-peak pesticides; multipoint calibration for aroclors 1016 and 1260 only	Whenever major instrument maintenance or modification is performed, or when calibration verification fails	To use average relative response factor (RRF) for quantitation of any analyte, %RSD must be ≤15%; otherwise use first order linear regression curve with correlation coefficient ≥0.995 or quadratic regression with coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	SW846 8081B, SW846 8082A, SW846 8151A
	Initial calibration verification (ICV)	Once for each multipoint initial calibration	All analytes within ±20% of expected value	Correct the problem, then repeat the initial calibration and reanalyze all samples	Laboratory analyst	
	CCV	At the start of each analytical sequence, after 12 hours or 10 samples whichever is more frequent, and at the end of the sequence	All analytes within ±20% of expected value; either column may be used to meet the calibration criteria, however, the analytes must be quantified from then column that met the criteria	Correct the problem, then repeat initial calibration and reanalyze all samples.	Laboratory analyst	
ICP-AES (metals)	Initial calibration	Before sample analysis, every 24 hours, whenever modifications are made to the system, or when continuing calibration verification fails	Correlation coefficient must be ≥0.997	Correct problem and repeat initial calibration.	Laboratory analyst	SW846 6010C

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	ICV	Once after each initial calibration, prior to sample analysis	Recovery must be 95-105%	Reanalyze, if problem persists, terminate analysis, correct problem, recalibrate, and re-verify the calibration	Laboratory analyst	
	QC check standard	Once after each initial calibration, prior to sample analysis	Recovery must be 90-110%	Terminate analysis, correct problem, recalibrate, and re-verify the calibration	Laboratory analyst	
	Initial calibration blank (ICB)	Immediately after analysis of ICV	Absolute value of blank result <3-sigma the mean calibration blank.	Terminate analysis, correct the problem, recalibrate, and re-verify the calibration	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	CCV	After every 10 samples and at the end of the analysis sequence	Recovery must be 90-110%	Terminate analysis, correct the problem, recalibrate and re-verify the calibration; reanalyze all samples and QC checks run since last acceptable CCV	Laboratory analyst	
	Continuing calibration blank (CCB)	Immediately after analysis of the CCV	Absolute value of blank must be <RL	Terminate analysis, correct problem, recalibrate and re-verify the calibration; reanalyze all samples and QC checks run since the last acceptable CCB	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
CVAA (mercury)	Initial calibration	Before sample analysis, every 24 hours, whenever modifications are made to the system, or when continuing calibration verification fails	Correlation coefficient must be ≥0.995	Correct problem and repeat initial calibration	Laboratory analyst	SW846 7471B, SW846 7470A
	QC check standard	Immediately following each initial calibration	All analytes within ±10% of expected value	Check QC solution; recalibrate and reanalyze; if results are still not acceptable, re-digest and reanalyze samples	Laboratory analyst	
	CCV	After every 10 samples and at the end of the analysis sequence	All analytes within ±20% of expected value	Recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	
Cyanide	Initial multipoint calibration (minimum eight standards and a calibration blank)	Annually or if analysis of continuing calibration or QC check standards do not meet criteria	Correlation coefficient ≥0.995 for linear regression	Correct problem then repeat initial calibration.	Laboratory analyst	SW846 9012, SW 846 Section 7.3.4.2

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Distilled standards (one high and one low)	Once per initial calibration	Value within ±10% of true value	Correct problem then repeat distilled standard	Laboratory analyst	
	CCV	Daily prior to sample analysis	Value within ±15% of true value	Prepare new calibration verification standard; recalibrate if problem cannot be located	Laboratory analyst	
Gamma Spectroscopy	Energy and efficiency calibration	After initial installation, annually, and following system maintenance that could affect the calibration	Energy calibration: full width at half maximum (FWHM) ±5% Efficiency calibration: (1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat calibration	Laboratory analyst	HASL 300 (or equivalent gamma spectroscopy method)

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Energy and efficiency check	Daily	Energy check: FWHM ±5% Efficiency check: (1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat calibration	Laboratory analyst	
	Background check	Daily	(1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat background check	Laboratory analyst	
Pensky-Martens	Determine flashpoint of xylenes	Once per 10 samples analyzed	Value of 81°F (±2°F)	Check apparatus for proper operation before analyzing samples	Laboratory analyst	SW846 1010
pH Meter	Initial calibration (minimum 2 points)	Daily	Slope of curve must be 100±5%	Correct problem and repeat calibration	Laboratory analyst	SW846 9045D

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Calibration verification	After initial calibration, after every 10 samples analyzed, and at the end of sample measurement	pH 7 buffer solution must exhibit pH of 7.00±0.05	Repeat initial calibration and reanalyze all associated samples	Laboratory analyst	

QAPP Worksheet #25
Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table

All laboratory analytical equipment will undergo maintenance and testing procedures in accordance with the laboratory SOPs. Laboratory SOPs must be compliant with minimum method requirements. Some typical maintenance and testing activities are included in the following table.

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
GC/MS; GC-ECD	Daily	Purge traps are baked out; changes of the traps are logged.	Laboratory analyst	SW846 8260B SW846 8270D SW846 8081B SW846 8082A
		Columns are baked out.		
		Volume of gas cylinders is checked.		
	As Required	Teflon ferrules are replaced.		
		Injection port liners are cleaned or replaced.		
		GC septa are changed after 50 injections.		
		Detectors are baked out.		
	Quarterly	Instrument electronics are visually inspected and cleaned.		
		Detectors are cleaned as recommended by the manufacturer or more frequently as needed.		
	Annually	Electron capture detectors are wipe tested.		
		Preventative maintenance performed by manufacturer as per service contract terms.	Manufacturer representative	
ICP-AES	Daily	Verify room temperature and humidity maintained to manufacturer's specifications.	Laboratory analyst	SW846 6010C
		Check argon tank pressure and verify that spare tank is available.		
		Inspect pump tubing before operation and every few hours.		
		Check that nebulizer is not clogged and that capillary tubing is clean and in good condition.		
		Inspect torch glassware and aerosol injector tube.		
		Be sure drain tube is firmly attached to spray chamber and drain bottle. Verify that drain bottle is not full and that there is liquid in the loop.		
	As Required	Check tension on peristaltic pump tubing.		

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
		Check nebulizer spray pattern with deionized water and clean spray tips if necessary.		
		Clean torch components with water or solvents. Replace cracked or work o-rings.		
		Inspect air filter and clean with soap and water if necessary.		
		Check performance by running Manganese Background Equivalent Concentration or Coefficient of Variation tests.		
CVAA	Daily	Clean and rinse all glassware with 20% nitric acid and 10% hydrochloric acid.	Laboratory analyst	SW846 7471B SW846 7470A
		Check tubing for contamination and wear.		
		Regenerate drying tube.		
	As Required	Rinse stannous chloride and pump tubing with 10% 10N sodium hydroxide and deionized water.		
		Wipe pump rollers with isopropyl alcohol.		
		Replace lamp and clean optical cell.		
Cyanide Analysis Distillation System	Daily	Clean glassware prior to reuse	Laboratory analyst	SW846 9012B SW 846 Section 7.3.4.2
		Rinse tubing connecting distillation heads and dispersion tube assemblies with reagent water		
	As Required	Replace tubing when it appears soiled		
	Semi-Annually	Replace tubing		
		Inspect spectrophotometer	Manufacturer representative	
	As Required	Change internal filling solution		
Gamma Spectroscopy System	Daily	Background, calibration, and LCS checks	Laboratory Supervisor	HASL-300 (or equivalent gamma spectroscopy method)
	Monthly	System background check		
	Annually	Efficiency and energy calibrations		
	Semi-Annually	Physical inspection		
		Test point voltage check	Manufacturer representative	
		Certified weight set response check		
		Re-generate column efficiency		
Pensky-Martens	Daily	Verify room temperature and humidity maintained to manufacturer's specifications.	Laboratory analyst	SW846 1010
		Wash flash cup with soap and water after each analysis.		

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
pH Meter	Daily	Clean glassware prior to reuse	Laboratory analyst	SW846 9045D
		Store electrode in pH 7 buffer solution or storage solution		
	As Required	Change internal filling solution		
		Re-generate column efficiency		

QAPP Worksheet #26
Sample Handling System

SAMPLE COLLECTION, PACKAGING, AND SHIPMENT
Sample Collection (Personnel/Organization): Sevenson field team
Sample Packaging (Personnel/Organization): Sevenson field team
Coordination of Shipment (Personnel/Organization): Sevenson field team
Type of Shipment/Carrier: Federal Express or United Parcel Service (UPS) for Overnight Delivery or courier to the laboratory
SAMPLE RECEIPT AND ANALYSIS
Sample Receipt (Personnel/Organization): Subcontract laboratory personnel
Sample Custody and Storage (Personnel/Organization): Subcontract laboratory personnel
Sample Preparation (Personnel/Organization): Subcontract laboratory personnel
Sample Determinative Analysis (Personnel/Organization): Subcontract laboratory personnel
SAMPLE ARCHIVING
Field Sample Storage (No. of days from sample collection): Samples will not be stored in the field, but will be shipped within 24 hours of collection. If in an emergency they are stored in the field, they will be kept in a cooler or transferred to a refrigerator kept at 4°C. Laboratory sample custodian will store samples at the laboratory for 30 days after the final report has been submitted to Sevenson.
Sample Extract/Digestate Storage (No. of days from extraction/digestion): Sample extraction and digestion must be conducted according to the requirements given in Worksheet #19. Laboratory analytical technicians will store all extracts/digestates for 30 days after the final report has been submitted to Sevenson.
Biological Sample Storage (No. of days from sample collection): Not applicable
SAMPLE DISPOSAL
Personnel/Organization: Subcontract laboratory personnel
Number of Days from Analysis: Samples may not be disposed of prior to 30 days after final report has been submitted to Sevenson.

QAPP Worksheet #27
Sample Custody Requirements

Proper sample handling, shipment, and maintenance of a chain of custody (COC) are key components of building the documentation and support for data that can be used to make project decisions. It is important that sample handling and sample COC requirements are performed completely, accurately, and consistently. A COC record establishes the documentation necessary to trace sample possession from time of collection through sample analysis and disposition.

A sample is considered to be in someone's custody if it:

- Is in his/her possession.
- Is in his/her view, after being in his/her possession.
- Is in his/her possession and has been placed in a secure area.
- Is in a designated secure area.

Field Logbooks/Documentation

The sequentially numbered field logbook (i.e., OU1 Soil Remediation #1, -#2, etc.) will provide the means of recording data collection activities performed. As such, logbook entries will be described in as much detail as possible so that particular site activities could be reconstructed without reliance on memory.

Field logbooks will be bound logbooks, field survey books, or notebooks. Logbooks will be assigned to field personnel, but will be stored in the document control center when not in use.

A project-specific document number will be used to identify each logbook. The title page of each logbook will contain the following information:

- Person to whom the logbook is assigned.
- Logbook number.
- Project name.
- Project start date.
- Project end date.

Entries into the logbook will contain a variety of information. The beginning of each entry will include: the date, start time, weather conditions, names of all sampling team members present, level of personal protection being used, and the signature of the person making the entry. The names of visitors to the site (including additional field sampling or investigative team personnel), and the purpose of their visit will also be recorded in the field logbook.

Measurements made and samples collected will be recorded in the field logbook. All entries will be made in ink and no erasures will be made. If an incorrect entry is made, the incorrect information will be crossed out with a single strike mark and initialed. Whenever a sample is collected or a measurement is made, a detailed description of the location of the station will be recorded in the logbook. The number of photographs taken at the station, if any, will also be noted. The logbook will identify all equipment used to make measurements.

Samples will be collected in accordance with the sampling procedures documented in Worksheet #17. The equipment used to collect samples will be noted, along with the time of sampling, sample description, depth of sample collection, volume, and the number of sample containers. The corresponding sample identification number will be prominently listed.

Field Procedures

The field sampler will be personally responsible for the care and custody of the samples until the samples are transferred or properly dispatched. As few people as possible will handle the samples. The CQCSM will review all field activities to determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

Sample Numbering System

A unique sample numbering scheme will be used to identify each sample designated for laboratory analysis. Sample identification numbers will be used on all sample labels, field data sheets or logbooks, chain of custody records, and all other applicable documentation used during the project. The sample identification scheme to be used for the project is as follows:

Offsite backfill and topsoil samples will be labeled: CD-BF-xx or CD-TS-xx

- CD-BF/CD-TS — Project site and sample type (Cornell-Dubilier backfill sample or Cornell-Dubilier topsoil sample)
- xx — Sequential sample number

Solid waste characterization samples will be labeled: CD-WC-xx

- CD-WC — Project site and sample type (Cornell-Dubilier waste characterization sample)
- xx — Sequential sample number

Wastewater characterization samples will be labeled: CD-WW-xx

- CD-WW — Project site sand sample type (Cornell-Dubilier wastewater sample)
- xx — Sequential sample number

Sample Labeling

Self-adhesive labels will be affixed to each sample container. The sample label will be completed in indelible ink and will include the following information:

- Project name
- Sample ID number
- Date and time of sample collection
- Sampler's initials
- Sample type (i.e., matrix)
- Preservative used, if any
- Analyses requested

Sample labels will be affixed to the sample containers and covered with clear packaging tape.

Chain of Custody Procedures

The COC form serves as an official communication to the laboratory detailing the particular analyses required for each sample. The COC record will accompany the samples from the time of sampling through all transfers of custody. The sample collector will complete a COC record to accompany each delivery container and will be responsible for shipping samples to the laboratory.

An example COC form is included in Appendix 5. The COC form and sample shipment documentation will be faxed or e-mailed to the laboratory when samples are shipped. The following information is typically recorded on manual COC forms:

- Project name and/or project number

- Signature of field sampler
- Field sample identification number
- Date and time of sample collection
- Grab or composite sample designation
- Sample matrix
- Analyses required
- Preservation technique
- Signatures and dates for transfer of custody
- Air express/shipper's bill of lading identification number

Lines not used on the COC record will be crossed out. A second member of the field sampling team will review the completed COC record to assure that required information is not omitted and that unused lines are crossed out. The original signature copy of the COC record will be enclosed in a plastic bag and secured to the inside of the cooler lid. A copy of the COC record will be retained for project files.

Packaging and Shipping Procedures

As an aid to field personnel and as part of the site QC inspections, Sevenson Checklist Number 007, "Task Specific QC Checklist – Packing, Storing, and Shipment of Samples" and Sevenson Checklist Number 010, "Task Specific Checklist – Sample Cooler Shipment" are included in Appendix 5. All samples will be packaged and labeled for shipment in compliance with current regulations. All samples should be shipped to the project laboratory within 24 hours of sample collection via overnight courier service to ensure timely receipt of the samples by the laboratory. The shipment of samples on Friday is discouraged unless it is absolutely necessary and the laboratory has assured that personnel will be present to receive the shipment on Saturday and implement any necessary processing within the analytical holding times.

Samples should be prepared for shipment as follows:

- Samples will immediately be placed in a cooler filled with ice for temporary storage prior to shipment to the laboratory. Sample labels are placed on samples immediately after sample collection.
- Secure the lid of the sample jar tightly. Wrap the sample jar with bubble wrap. Place each sample jar in a separate ziplock-style plastic bag and seal.
- Only metal or plastic ice chests will be used for shipping samples. Tape shut any drain plugs on both the inside and outside of the cooler. Place a new, clean garbage bag inside the cooler as a secondary liner.
- Place bubble wrap or other suitable, waterproof packaging material between each sample bag to take up any void space in the cooler and to prevent the containers from touching. Place a temperature blank (i.e., a small bottle or jar filled with water) in close proximity to the sample containers.
- Ice used in coolers for shipping to the laboratories will be placed in doubled ziplock-style bags with a minimum amount of air. Use an adequate amount of ice bags such that the samples arrive at the laboratory at 4°C. Secure the secondary cooler liner with a twist-tie or knot.
- The COC record will be placed inside a ziplock-style bag and taped to the inside of the cooler top.
- The cooler will be closed and taped shut with packing tape or duct tape, and a custody seal will be properly placed across two sides of the cooler lid, preferably one on the front and one on the side.
- The shipping air bill will be securely attached to the exterior of the cooler. Commercial carriers or sample pickup couriers are not required to sign the COC record if it is sealed inside the shipping cooler and the custody seals remain intact. A copy of the bill of lading must be retained in the project files.

Laboratory Chain of Custody Procedures

The laboratory sample custodian will reconcile the information on the COC records with the sample bottles received and sign and date all appropriate receiving documents. The sample custodian will document any anomalies and report these to the laboratory project manager. Anomalies will be resolved with the field sampler or CQCSM. The information will be entered in the Laboratory Information Management System (LIMS) along with the analyses being requested. To ensure traceability of samples while in possession of the laboratory, a method for sample identification that has been documented by the laboratory will be used to assign internal sample numbers. The sample custodian is responsible for seeing that all samples are transferred to the proper analyst or stored in the appropriate secure area. Laboratory personnel are responsible for the care and custody of samples from the time they are received, until the sample is exhausted or returned to the custodian using an internal COC record to track sample movement within the laboratory. When sample analyses and necessary QA checks have been completed in the laboratory, the unused portion of the sample will be disposed of properly. All identifying stickers, data sheets, and laboratory records are retained as part of the documentation. Sample containers and remaining samples are disposed of in compliance with federal, state, and local regulatory requirements.

Final Evidence Field Custody Procedures

The evidence files for the project are maintained at the Sevenson office. The content of the evidence file will include all relevant records, reports, correspondence, logs, field logbooks, laboratory sample preparation and analysis logbooks, data packages, pictures, subcontractor reports, chain of custody records, data review reports, etc. The evidence file will be under custody of the contractor project manager in a locked, secure area. The selected contract laboratory will also retain evidence files of analytical data for a minimum of seven years.

QAPP Worksheet #28-1
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	Metals and Cyanide
Concentration Level	Low
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	SW846 6010C, 7471B, 9012B
Sampler's Name	To Be Determined (TBD)
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Calibration blank	Before beginning a sample run, after every 10 samples, and at the end of the analytical sequence	Per QAPP and laboratory SOP	Correct problem. Re-prep and reanalyze calibration blank. All samples following the last acceptable calibration blank must be reanalyzed.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >LOD
Method Blank	One per preparatory	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
ICS (required for method SW846 6010C only)	The beginning of an analytical run	Per QAPP and laboratory SOP	Terminate analysis; locate and correct problem; reanalyze ICS and all samples	Laboratory analyst	Precision, Accuracy	*ICS-A:* Absolute value of concentration for all non-spiked analytes <LOD. *ICS-AB:* Within ±20% of true value

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. If the MS falls outside of criteria, additional quality control tests are required to evaluate matrix effects.	Laboratory analyst	Accuracy	Recovery: 80-120%
Laboratory Duplicate	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision	RPD ≤20% between sample and sample duplicate
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Recovery: 80-120%
Serial Dilution	One per preparatory batch	Per QAPP and laboratory SOP	*SW846 6010C:* Perform PDS addition *SW846 7471B:* Perform recovery test	Laboratory analyst	Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample
PDS (required for method SW846 6010C only)	When dilution test fails or analyte concentration in all samples <50x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by method of standard additions (MSA) or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 75-125%
Recovery Test (required for method SW846 7471B only)	When dilution test fails or analyte concentration in all samples <25x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 85-115%

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-2
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	VOCs, SVOCs, Pesticides, PCBs
Concentration Level	Trace (VOCs), Low (SVOCs, Pesticides, PCBs)
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	SW846 8260B, 8270D, 8081B, 8082A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
Surrogate Spike	All field and QC samples	Per QAPP and laboratory SOP	Correct problem then reprep and reanalyze all failed samples for the failed surrogates in the associated preparatory batch, if sufficient sample material is available. If obvious chromatographic interference with surrogate is present, reanalysis may not be necessary.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-3
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	Radiological Parameters
Concentration Level	Low
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	HASL-300 (or equivalent gamma spectroscopy method)
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory personnel	Accuracy, Sensitivity	All target compounds ≤RL
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific data quality objectives. Contact the client as to additional measures to be taken.	Laboratory Personnel	Precision, Accuracy	Should meet NAD criteria of ≤3.92
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes if sufficient sample material is available.	Laboratory personnel	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-4
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP Metals (solid waste characterization to also include copper, nickel, and zinc)
Concentration Level	Low to Medium
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 6010C/7470A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Calibration blank	Before beginning a sample run, after every 10 samples, and at the end of the analytical sequence	Per QAPP and laboratory SOP	Correct problem. Re-prep and reanalyze calibration blank. All samples following the last acceptable calibration blank must be reanalyzed.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >LOD
Method Blank	One per preparatory	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
ICS (required for method SW846 6010C only)	The beginning of an analytical run	Per QAPP and laboratory SOP	Terminate analysis; locate and correct problem; reanalyze ICS and all samples	Laboratory analyst	Precision, Accuracy	*ICS-A:* Absolute value of concentration for all non-spiked analytes <LOD. *ICS-AB:* Within ±20% of true value

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. If the MS falls outside of criteria, additional quality control tests are required to evaluate matrix effects.	Laboratory analyst	Accuracy	Recovery: 80-120%
Laboratory Duplicate	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision	RPD ≤20% between sample and sample duplicate
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Recovery: 80-120%
Serial Dilution	One per preparatory batch	Per QAPP and laboratory SOP	*SW846 6010C:* Perform PDS addition *SW846 7470A:* Perform recovery test	Laboratory analyst	Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample
PDS (required for method SW846 6010C only)	When dilution test fails or analyte concentration in all samples <50x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 75-125%
Recovery Test (required for method SW846 7470A only)	When dilution test fails or analyte concentration in all samples <25x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 85-115%

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-5
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, PCBs
Concentration Level	Low to High
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 8260B, 8270D, 8081B, 8151A, 8082A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
Surrogate Spike	All field and QC samples	Per QAPP and laboratory SOP	Correct problem then reprep and reanalyze all failed samples for the failed surrogates in the associated preparatory batch, if sufficient sample material is available. If obvious chromatographic interference with surrogate is present, reanalysis may not be necessary.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-6
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Reactivity (Sulfide and Cyanide)
Concentration Level	Low
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 Sections 7.3.3.2 and 7.3.4.2
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Reanalyze	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-7
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Ignitability
Concentration Level	NA
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 1010
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Laboratory Duplicate	One per batch of 20 samples	Per QAPP and laboratory SOP	Re-prepare and reanalyze	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per batch of 20 samples	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Precision/Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-8
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	pH[1]
Concentration Level	NA
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 9045D, SW846 9040C
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC
Initial Calibration Verification	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Sensitivity	±0.10 pH unit of the temperature adjusted pH value
Continuing Calibration Verification	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Sensitivity	±0.05 pH unit of the temperature adjusted pH value
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Precision	Must agree within ±0.10 pH units
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] Analysis for solid waste characterization will be performed on both the solid material and the TCLP extract.

QAPP Worksheet #28-9
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Oil and Grease[1]
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	EPA 1664A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Reanalyze	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] Analysis will be performed on both the solid material and the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-10
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Ammonia-Nitrogen[1]
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM 4500NH3 D
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-11
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	COD[1]
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM5220D
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-12
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Total Volatile Solids
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM2540G
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-13
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Total Solids[1]
Concentration Level	NA
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM2540B
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory personnel	Accuracy, Sensitivity	All target compounds ≤RL
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific data quality objectives. Contact the client as to additional measures to be taken.	Laboratory Personnel	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes if sufficient sample material is available.	Laboratory personnel	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-13
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Free Liquids
Concentration Level	NA
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SW846 9095
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

QAPP Worksheet #29
Project Documents and Records

Sample Collection Documents and Records	On-Site Analysis Documents and Records	Off-Site Analysis Documents and Records	Data Assessment Documents and Records	Other
▪ Field logbooks ▪ Chain of custody records ▪ Air bills ▪ Custody seals ▪ Field Change Request forms ▪ Corrective Action forms ▪ Daily Chemical Quality Control Reports ▪ Photo logs	▪ Not applicable – no onsite analysis will be performed.	▪ Sample receipt, chain of custody forms, and sample tracking records ▪ Equipment calibration logs ▪ Sample preparation logs ▪ Case narrative, data packages ▪ Definition of laboratory qualifiers ▪ Equipment maintenance, testing, and inspection logs ▪ Corrective action forms ▪ Reported field sample results ▪ Electronic data deliverables ▪ Reported results with standards, QC checks, and QC samples ▪ Instrument printouts for field samples, standards, and QC samples ▪ Data package completeness checklists ▪ Technical/QA forms ▪ Data assessment reports ▪ Extraction/cleanup records ▪ Sample disposal records	▪ Field sampling audit checklists ▪ Offsite laboratory audit checklists ▪ Data review reports ▪ Corrective action forms ▪ Telephone logs	▪ Disposal facility waste approval forms ▪ Waste shipping manifests and/or bill-of-lading

QAPP Worksheet #30
Analytical Services Table

Matrix	Analytical Group	Concentration Level	Sample Locations/ID Number	Analytical SOP	Data Package Turnaround Time[1]	Laboratory/ Organization (name and address, contact person and telephone number)	Backup Laboratory/ Organization (name and address, contact person and telephone number)
Offsite backfill	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	Offsite backfill and topsoil sources	SW846 8260B SW846 8270D SW846 8081B SW846 8082A SW846 6010C/7471B SW846 9012B HASL-300 (or equivalent gamma spectroscopy method)	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.
Solid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide Oil and Grease Ammonia-Nitrogen, COD Total Volatile Solids Total Solids Free Liquids	Low to High	In-situ from predetermined excavation areas	SW846 8260C SW846 8270D SW846 8081B SW846 8151 SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2 USEPA 1664A SM4500NH3 D SM5220D SM2540G SM2540B SW846 9095	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.
Solid Waste Characterization	PCBs	Low to High	In-situ from predetermined excavation areas	SW846 8082A	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.

Matrix	Analytical Group	Concentration Level	Sample Locations/ID Number	Analytical SOP	Data Package Turnaround Time[1]	Laboratory/ Organization (name and address, contact person and telephone number)	Backup Laboratory/ Organization (name and address, contact person and telephone number)
Liquid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	Storage tanks	SW846 8260C SW846 8270D SW846 8081B SW846 8151 SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.

[1] The full deliverable is defined as the complete analytical data report with laboratory quality control results and EDD which will be reviewed by Sevenson. The Sevenson data review will be completed within 7 days of receipt of the full deliverable from the laboratory.
[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #31
Planned Project Assessments Table

Assessment Type	Frequency	Internal or External	Organization Performing Assessment	Person(s) Responsible for Performing Assessment	Person(s) Responsible for Responding to Assessment Findings	Person(s) Responsible for Identifying and Implementing CA	Person(s) Responsible for Monitoring Effectiveness of CA
Specific field procedure assessment and UFP-QAPP compliance	Initially within the first week and the at least quarterly if necessary	Internal	Sevenson self assessment	William Zambrana, Sevenson CQCSM	Sevenson Field Team Leader	Sevenson Field Team Leader	William Zambrana, Sevenson CQCSM Sevenson Field Team Leader
Data review	As data becomes available from the laboratory	Internal and External	Sevenson project chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer
Data review to assign regulatory status of materials for offsite disposal	As data becomes available from the laboratory	Internal	Sevenson regulatory specialist	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator
Daily field documentation review	Daily	Internal	Sevenson self assessment	William Zambrana, Sevenson CQCSM	Sevenson Field Team Leader	Sevenson Field Team Leader	William Zambrana, Sevenson CQCSM Sevenson Field Team Leader
Health and safety audit	Initially within the first week of field work and then at least quarterly if necessary	Internal	Sevenson self assessment	Eric Tschudi, Sevenson SSHO	Kim Lickfield, Sevenson Project Manager	Sevenson Field Team Leader	Eric Tschudi, Sevenson SSHO

QAPP Worksheet #32
Assessment Findings and Corrective Action Responses

Assessment Type	Nature of Deficiencies Documentation	Individual(s) Notified of Findings	Timeframe of Notification	Nature of Corrective Action Response Documentation	Individual(s) Receiving Corrective Action Response	Timeframe for Response
Data validation	Laboratory resubmissions	Laboratory QA officer	After arrival of data from the lab and during data validation activities	Corrective action reports and/or updated case narratives and corrected data submissions	Jennifer Singer, Sevenson Project Chemist	7 business days
Daily field documentation reviews	Internal letter and any verification documentation	Kim Lickfield, Sevenson Project Manager	1 business day	Plan for correction and verification that correction is complete	Kim Lickfield, Sevenson Project Manager	1 business day
Internal project reporting reviews	Internal report comments	Kim Lickfield, Sevenson Project Manager	7 business days	Response to comment and applicable report correction	Kim Lickfield, Sevenson Project Manager	7 business days
Health and safety audit	Written audit report	Kim Lickfield, Sevenson Project Manager	3-5 business days	Letter and any verification documentation	Sevenson Field Team Leader	24 hours after notification

QAPP Worksheet #33
QA Management Reports Table

Type of Report	Frequency	Projected Delivery Date(s)	Person(s) Responsible for Report Preparation	Report Recipient(s)
Daily Chemical Quality Control Report	Daily during field work	Duration of field activities	Sevenson Field Team Leader	Kim Lickfield, Sevenson Project Manager USACE
Field Audit Report	Initially within the first two weeks of field work and with follow-up audits if significant deficiencies are found	Month after field work begins	William Zambrana, Sevenson CQCSM	Kim Lickfield, Sevenson Project Manager
Corrective Action Report	When corrective action is required	When corrective action is implemented	William Zambrana, Sevenson CQCSM	Kim Lickfield, Sevenson Project Manager
Data Review Report	After laboratory data is received	Within 45 days after receiving data	Jennifer Singer, Sevenson Project Chemist	William Zambrana, Sevenson CQCSM Kim Lickfield, Sevenson Project Manager
Quality Control Summary Report	After all lab data is received and reviewed	Within 45 days after receipt of the last laboratory data report	Jennifer Singer, Sevenson Project Chemist	USACE, USEPA
Health and Safety Audit	Once	Submitted with Final Reports	Eric Tschudi, Sevenson SSHO	USACE, USEPA

QAPP Worksheet #34
Verification (Step I) Process Table

Verification Input	Description	Internal/ External	Responsible for Verification
Chain of custody and shipping forms	COC forms and shipping documentation will be reviewed internally upon their completion and verified against the packed sample coolers they represent. The shipper's signature on the COC will be initialed by the reviewer, a copy of the COC retained in the site files, and the original and remaining copies taped inside the cooler for shipment. Refer to Worksheet #27 for additional details.	Internal	William Zambrana, Sevenson
Audit reports	Upon report completion, a copy of all audit reports will be placed in the site file. If corrective actions are required, a copy of the documented corrective action will be attached to the appropriate audit report in the site file. Copies of Sevenson's internal QC checklists, corrective action forms, and field change request forms are included in Appendix 5.	Internal	William Zambrana, Sevenson
Field notes	Field notes will be reviewed internally at the end of each working day and placed in the site file.	Internal	William Zambrana, Sevenson
Laboratory data	All laboratory packages will be verified internally by the laboratory performing the work for completeness and technical accuracy prior to submittal. All data packages will be verified internally by the Sevenson project chemist or designee according to the data review procedures specified in Worksheet #36.	Internal/External	Laboratory QA Officer Jennifer Singer, Sevenson
UFP-QAPP	All planning documents will be available to reviewers to allow reconciliation with planned activities and objectives.	Internal	William Zambrana, Sevenson Jennifer Singer, Sevenson

QAPP Worksheet #35
Validation (Steps IIa and IIb) Process Table

Step IIa / IIb	Validation Input	Description	Responsible for Validation
IIa	Laboratory data packages	Ensure that all analytical procedures were followed. Corrective actions will be taken and documented when applicable per specific methods. Data will be qualified in accordance with specific methods. Any deviations will be documented.	Laboratory personnel Jennifer Singer, Sevenson
IIa	Documentation of method QC results	Establish that all method required QC samples were run and met required limits.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Documentation of UFP-QAPP QC sample results	Establish that all UFP-QAPP required QC samples were run and met required limits.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Project quantitation limits	All sample results met the project quantitation limit specified in the UFP-QAPP.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Sampling procedures	Evaluate whether sampling procedures were followed with respect to equipment and proper sampling support.	William Zambrana, Sevenson Jennifer Singer, Sevenson
IIb	Deviations (sampling and analysis)	Determine the impacts of any deviations from sampling or analytical methods and SOPs	William Zambrana, Sevenson Jennifer Singer, Sevenson USACE USEPA

QAPP Worksheet #36
Validation (Steps IIa and IIb) Summary Table

Step IIa / IIb	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator
IIa/IIb	Offsite backfill	Metals, cyanide, VOCs, SVOCs, PCBs, pesticides, and radiological parameters	Trace to Low	*Organic:* USEPA National Functional Guidelines; *Inorganic:* USEPA National Functional Guidelines; *Radiological:* MARLAP, Chapter 8, Section 5	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Solid Waste Characterization[1]	TCLP VOCs, SVOCs, Pesticides, Herbicides, Metals PCBs RCRA Characteristics (pH, ignitability, reactive cyanide, reactive sulfide) Pennsylvania Form U (oil and grease, ammonia-nitrogen, COD, Total Volatile Solids, Total Solids, Free Liquids)	Low to High	*Organic:* USEPA National Functional Guidelines; *Inorganic:* USEPA National Functional Guidelines	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Solid Waste Characterization	PCBs	Low to High	*Organic:* USEPA National Functional Guidelines	Jennifer Singer, Sevenson Data Quality Control Review Chemist

Step IIa / IIb	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator
IIa/IIb	Liquid Waste Characterization[1]	TCLP VOCs, SVOCs, Pesticides, Herbicides, Metals PCBs RCRA Characteristics (pH, ignitability, reactive cyanide, reactive sulfide)	Low to High	*Organic:* USEPA National Functional Guidelines; *Inorganic:* USEPA National Functional Guidelines	Jennifer Singer, Sevenson Data Quality Control Review Chemist

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #37
Usability Assessment

Summarize the usability assessment and all procedures, including interim steps and any statistics, equations, and computer algorithms that will be used:

It is the responsibility of the Sevenson Project Chemist and the laboratory to ensure that the data meet the method detection limits, reporting limits, and laboratory QC limits listed in the UFP-QAPP. During the data validation assessment, non-conformances are documented and data are qualified for use in decision making. The data are determined to be usable by the Project Chemist based on the requirements of this UFP-QAPP. Data gaps will be present if a sample is not collected, a sample is not analyzed for the requested parameters, or the data are determined to be unusable. The need for further investigation will be determined on a case-by-case basis, depending on whether data can be extrapolated from adjacent sampling locations, and whether or not the results are unnecessary based on the results from adjacent locations. All data are usable as qualified by the data validator, with the exception of rejected data. Estimated and/or biased results are usable.

Describe the evaluative procedures used to assess overall measurement error associated with the project:

In depth assessment occurs during the data validation process. The validation will follow approved USEPA Region 2 Guidelines and SOPs to assess conformance with the requirements of the methods, SOPs, and objectives of this UFP-QAPP. The findings of the data validation will generate qualifiers applied to the data considered in context to assess overall usability of the data.

Identify the personnel responsible for performing the usability assessment:

Jennifer Singer, Sevenson Project Chemist

Describe the documentation that will be generated during usability assessment and how usability assessment results will be presented so that they identify trends, relationships (correlations), and anomalies:

The data validation reports will identify precision and accuracy exceedances with respect to the laboratory performance for each batch of samples, as well as comparability of field and laboratory duplicates. All the results will be assembled and reported for an overall quality assessment provided in the QCSR and final project report. Discussion will cover precision, accuracy/bias, sensitivity, representativeness, comparability, completeness, and reconciliation, defined as follows.

Precision. Results of laboratory duplicates will be assessed during data review and data will be qualified according to the data review procedures cited on Worksheet #36. Field duplicate samples will not be collected due to the limited nature of the sampling. A discussion summarizing the results of laboratory precision and any limitations on the use of the data will be described in the QCSR.

Accuracy/Bias Contamination. Results of laboratory blanks will be assessed as part of data review. During the review process the reviewer will qualify the data following the procedures described on Worksheet #36. A discussion summarizing the results of laboratory accuracy and bias based on contamination will be presented and any limitation on the use of the data will be described in the QCSR.

Overall Accuracy/Bias. The results of matrix spike recoveries will be reviewed and data will be qualified according to the data review procedures cited on Worksheet #36. A discussion summarizing the results of laboratory accuracy and any limitations on the use of the data will be described in the QCSR.

Sensitivity. Data results will be compared to clean-up criteria provided on Worksheet #15. A discussion summarizing any conclusions about the sensitivity of the analyses will be presented and any limitations on the use of the data will be described in the QCSR.

Representativeness. A review of adherence to field procedures and of project quality control audits will be performed in order to assess the representativeness of the sampling program. Data review narratives will also be reviewed and any conclusions about the representativeness of the data set will be discussed.

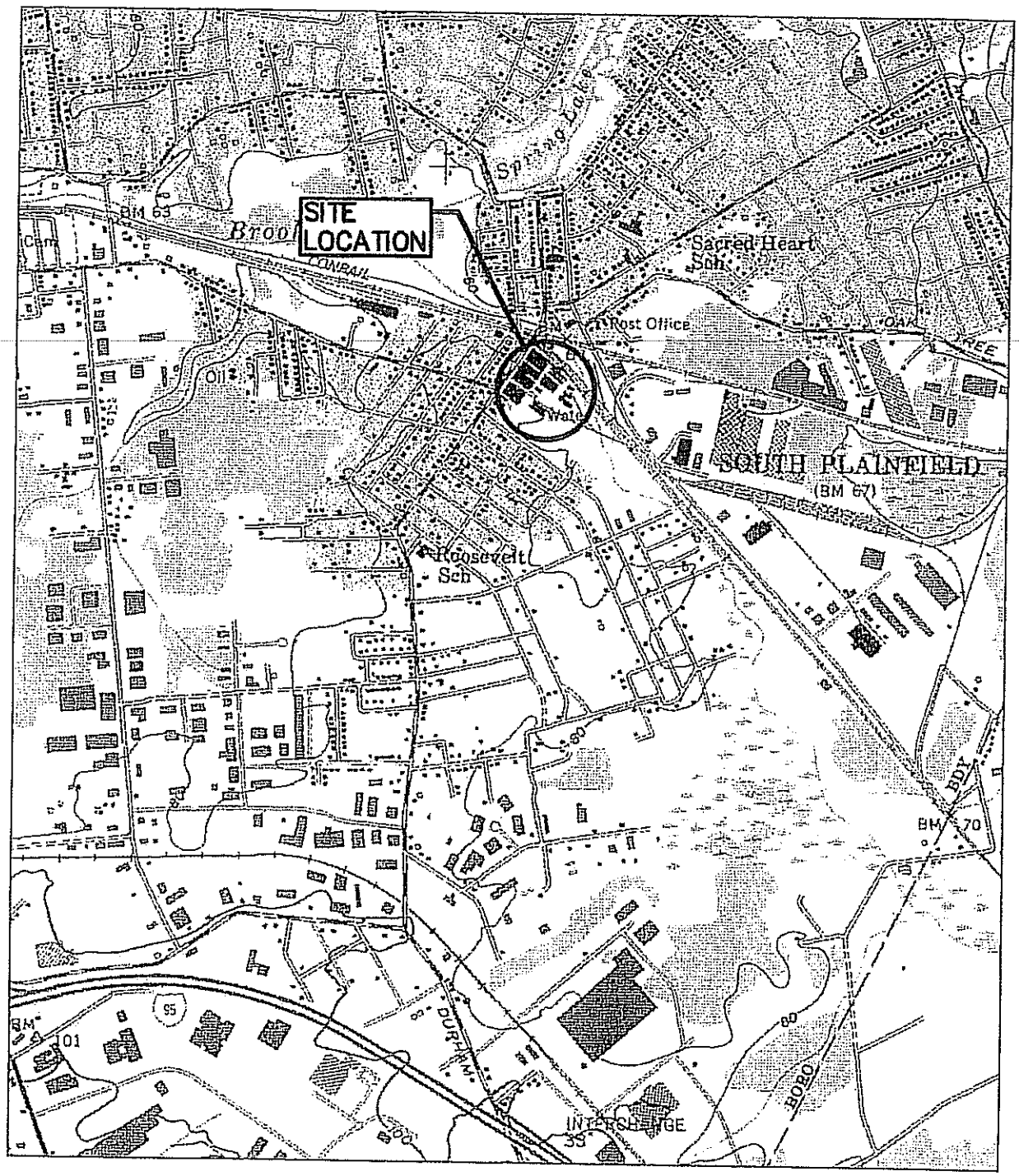
Comparability. Data will be collected, analyzed, and reported in a manner that is comparable to the existing site data.

Completeness. A completeness check will be done on all data generated by the laboratory. Completeness will be calculated for each analyte as follows. For sampling, completeness will be calculated as the number of samples collected and analyzed by the laboratory divided by the number planned for collection. Also for each analyte, completeness will be calculated as the number of data points for each analyte that meets measurement performance criteria divided by the total number of data points for that analyte. A discussion summarizing the results of project completeness and any limitations on the use of the data will be described in the QCSR.

Reconciliation. The project quality objectives presented in Worksheet #12 will be examined to determine if the objective was met. This examination will include a combined overall assessment of the results of each analysis pertinent to an objective. Each analysis will first be evaluated separately in terms of major impacts observed from data review, data quality indicators, and measurement performance criteria assessments. Based on the results of these assessments, the quality of the data will be determined. Based on the quality determined, the usability of the data for each analysis will be determined. Based on the combined usability of the data from all analyses for an objective, it will be determined if the project quality objective was met and whether project goals were achieved. As part of the reconciliation of each objective, conclusions will be drawn and any limitations on the usability of any of the data will be described.

APPENDIX 1

FIGURES

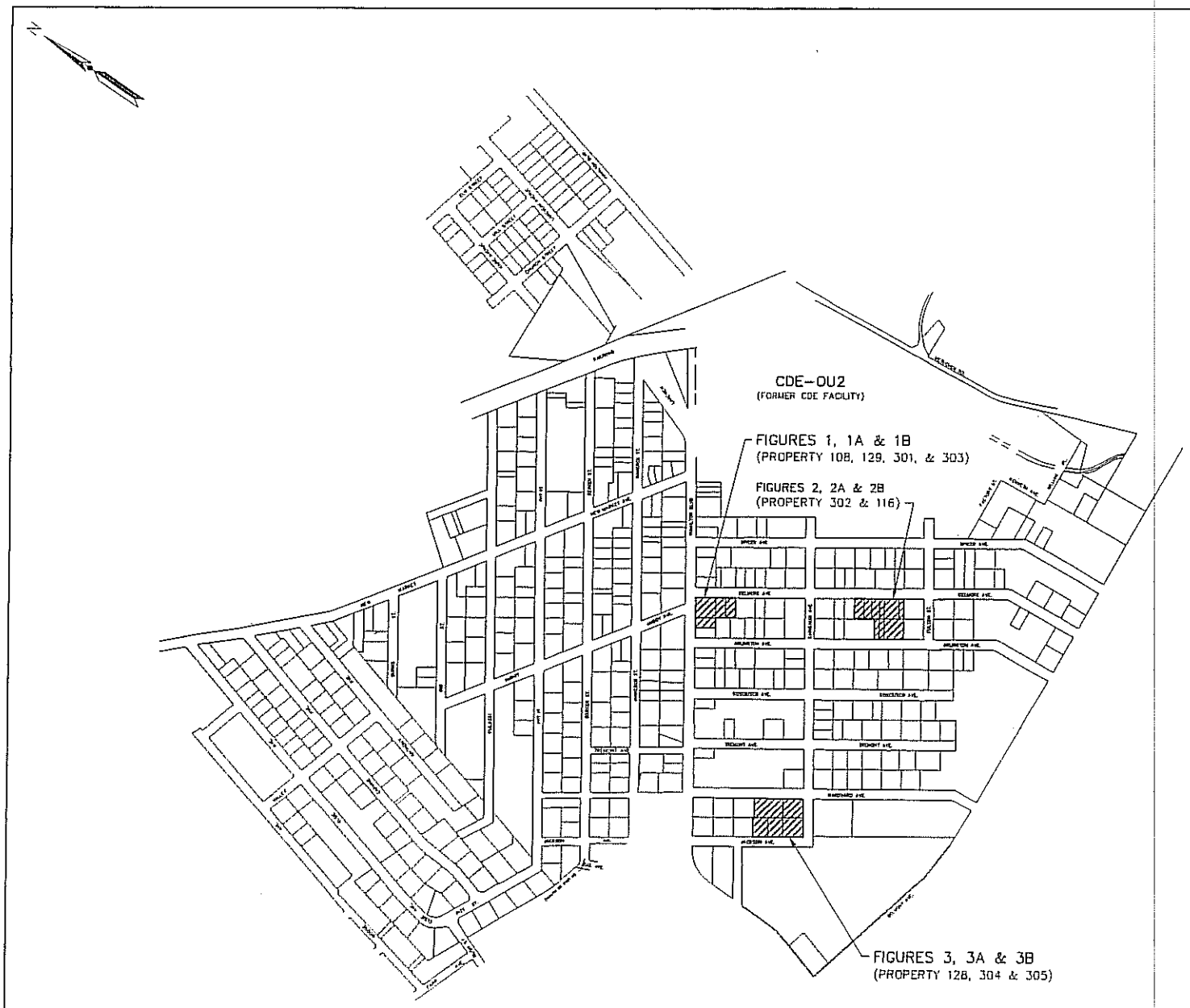


1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

SOURCE: U.S.G.S. TOPOGRAPHIC MAP,
7.5 MINUTE SERIES, PLAINFIELD, NEW JERSEY
QUADRANGLE, 1955, PHOTOREVISED 1981

MALCOLM PIRNIE	U.S. ARMY CORPS OF ENGINEERS CORNELL-DUBILIER SUPERFUND SITE OU-2 SOILS SOUTH PLAINFIELD, NEW JERSEY CONTRACT NO. W912DQ-06-D-0006 TO 0001	SITE LOCATION MAP SCALE AS NOTED	MALCOLM PIRNIE, INC. JULY 2007 FIGURE 1-1

User: ...OND Spec: PIRNIE STANDARD File: I:\ACAD\PROJ\4553033\CLIENT\BUFFALO\04-03-07\Site-LOC-4553023-B.DWG Scale: 1:1 Date: 07/17/2007 Time: 15:36 Layout: FIGURE 1



KEY MAP
NOT TO SCALE

ARCADIS

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORVELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
KEY MAP

JOB NO:
CONTRACT NO:
SHEET NAME: K-1
SHEET 3 OF 11
FILE NAME:
DRAWN BY: K. IANICELI
DESIGNED BY: A. MASON
CHECKED BY: D. CHIARO
DATE: JANUARY 2012

TABLE 1a E.	JN COORDINATE TABLE	
EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	634411	515616
A2	634384	515597
A3	634364	515624
A4	634392	515643
B1	634384	515597
B2	634369	515585
B3	634357	515603
B4	634351	515614
B5	634364	515624
C1	634366	515584
C2	634328	515557
C3	634276	515630
C4	634272	515627
C5	634268	515632
C6	634265	515630
C7	634261	515635
C8	634269	515640
C9	634281	515648
C10	634300	515623
C11	634309	515629
C12	634330	515600
C13	634342	515609
C14	634354	515599
C7	634261	515635
C8	634281	515648
C9	634300	515623
C10	634309	515629
C11	634330	515600
C12	634342	515609
C13	634354	515599
D1	634417	515644
D2	634413	515619
D3	634373	515676
D4	634377	515678
E1	634365	515681
E2	634344	515666
E3	634340	515666
E4	634334	515672
E5	634326	515681
E6	634322	515690
F1	634353	515653
F2	634347	515649
F3	634343	515655
F4	634349	515659
G1	634352	515699
G2	634306	515666
G3	634302	515675
G4	634320	515687
G5	634322	515695
G6	634320	515690
G7	634329	515711
G8	634339	515718
H1	634306	515666
H2	634267	515639
H3	634232	515697
H4	634247	515708
H5	634267	515708
H6	634297	515727
H7	634305	515715
H8	634287	515702
H9	634290	515697
H10	634284	515693
H11	634280	515699
H12	634266	515689
H13	634263	515693
H14	634244	515679
H15	634257	515662
H16	634274	515675
H17	634287	515660
H18	634303	515673
H19	634238	515680
H20	634241	515653
I1	634264	515651
I2	634279	515647
I3	634274	515655
I4	634279	515659

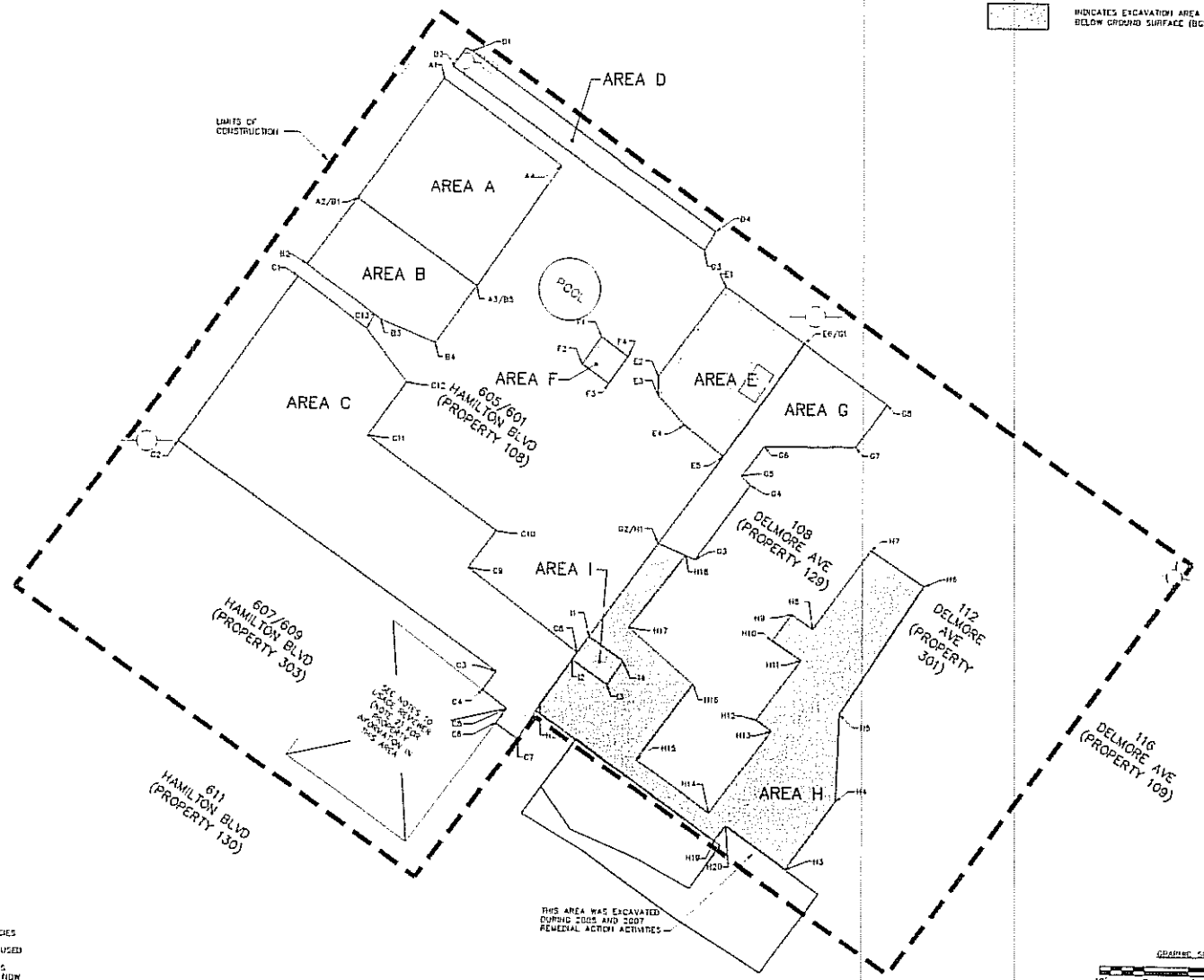
TABLE 1b – VOLUME OF EXCAVATION		
AREA	SQ. FT.	VOLUME
A	1125	42 CY
B	627	13 CY
C	3054	57 CY
D	255	5 CY
E	681	24 CY
F	56	4 CY
G	719	14 CY
H	2142	160 CY
I	62	5 CY
TOTAL EXCAVATION VOLUME		339 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER
3. CONTRACTOR SHALL EXCAVATE UP TO THE PREVIOUSLY EXCAVATED AREA ON 109 ARLINGTON. IT IS ESTIMATED THAT THIS WILL BE 2 TO 3 FEET ONTO THE PROPERTY. CONTRACTOR SHALL CONFIRM VISUALLY IN THE FIELD

LEGEND

- INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–30" BELOW GROUND SURFACE (BGS)



NOTES TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (I.E. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED
2. PROPERTY FEATURES AT THIS LOCATION ARE BEING CONFIRMED BY SURVEYOR. EXACT LOCATION OF PAVEMENT TO BE CONFIRMED

ARCADIS

REVISIONS:

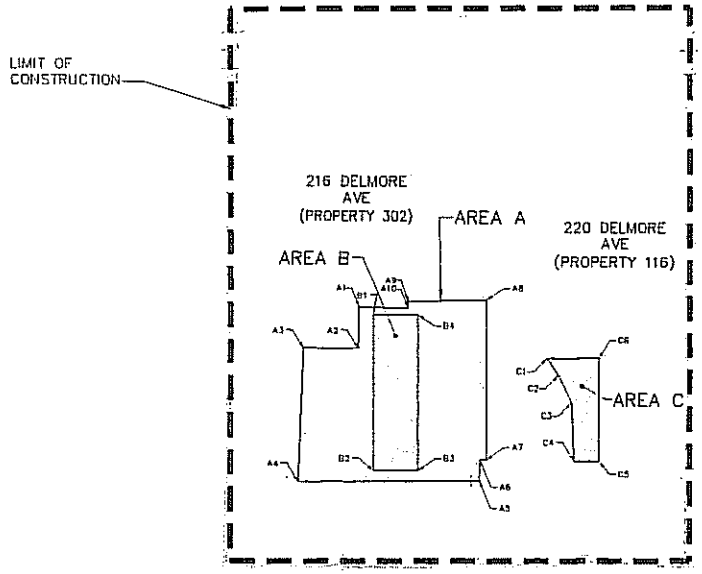
No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 108, 129, 301 & 303 EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE 1A
DRAWN BY: H. IANICEU
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
SHEET 3 OF 13
FILE NAME:
DATE: JANUARY 2012



LEGEND

INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-24" BELOW GROUND SURFACE (BGS)

TABLE 2a EXCAVATION COORDINATE TABLE		
EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633865	516261
A2	633861	516256
A3	633855	516247
A4	633867	516231
A5	633845	516261
A6	633849	516263
A7	633848	516265
A8	633874	516253
A9	633865	516270
A10	633862	516269
B1	633865	516263
B2	633859	516244
B3	633854	516253
B4	633880	516270
C1	633857	516267
C2	633853	516266
C3	633847	516265
C4	633837	516270
C5	633834	516263
C6	633851	516255

TABLE 2b – VOLUME OF EXCAVATION		
AREA	SQ. FT.	VOLUME
A	972	19 CY
B	791	17 CY
C	536	11 CY
TOTAL EXCAVATION VOLUME		52 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 2a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1"= 10'-0"

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED.

ARCADIS

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME: OU-1 REMEDIAL DESIGN CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE: PROPERTY 116 & 302 EXCAVATION PLAN

JOB NO:

CONTRACT NO:

SHEET NAME: FIGURE 2A

SHEET 10 OF 13

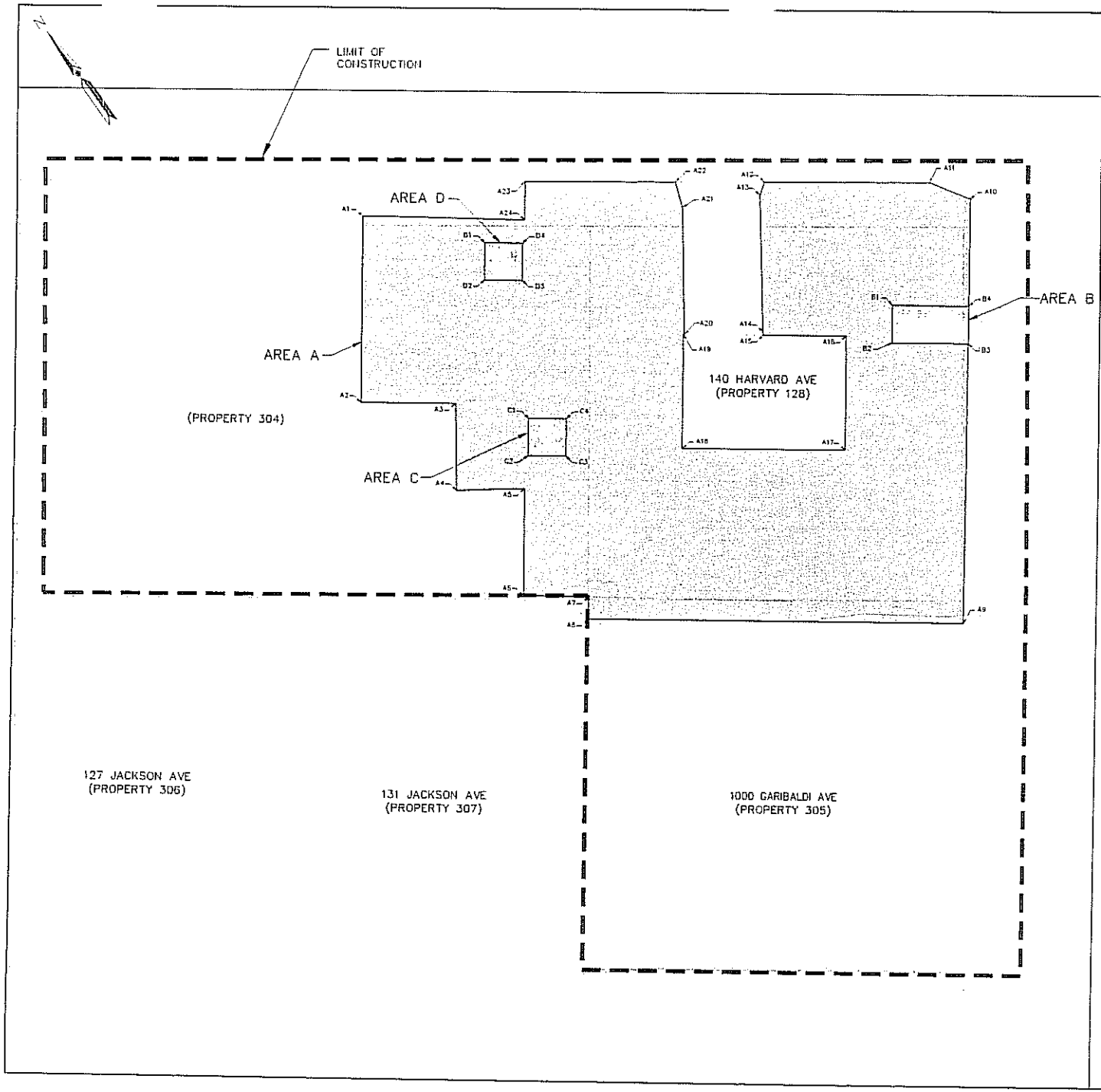
FILE NAME:

DRAWN BY: K. IANICELI

DESIGNED BY: A. MASON

CHECKED BY: D. GIRARD

DATE: JANUARY 2012



LEGEND

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE

TABLE 3a - EXCAVATION POINTS

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633371	515352
A2	633331	515323
A3	633316	515343
A4	633297	515330
A5	633280	515345
A6	633263	515329
A7	633253	515342
A8	633246	515339
A9	633169	515420
A10	633269	515487
A11	633290	515481
A12	633318	515445
A13	633314	515442
A14	633284	515421
A15	633263	515421
A16	633270	515439
A17	633245	515421
A18	633271	515380
A19	633296	515404
A20	633295	515404
A21	633323	515423
A22	633320	515426
A23	633353	515392
A24	633345	515387
B1	633259	515454
B2	633261	515448
B3	633249	515464
B4	633257	515470
C1	633301	515357
C2	633293	515351
C3	633297	515359
C4	633295	515363
D1	633346	515375
D2	633338	515369
D3	633332	515377
D4	633340	515383

TABLE 3b – VOLUME OF EXCAVATION

AREA	SQ. FT.	VOLUME
A	27,760	2057 CY
B	204	30 CY
C	100	9 CY
D	100	9 CY
TOTAL EXCAVATION VOLUME		2105 CY

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED

GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1"= 10'-0"

ARCADIS

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME

OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE

PROPERTY 128, 304 & 305
EXCAVATION PLAN

JOB NO:

CONTRACT NO:

SHEET NAME: FIGURE 3A

SHEET 13 OF 15

FILE NAME:

DRAWN BY: K. IANICELI

DESIGNED BY: A. MASON

CHECKED BY: B. GIRARD

DATE: JANUARY 2012

APPENDIX 2

DATA NEEDS TABLE

Appendix 2

Data Needs Table

Operable Unit 1 – Soil Remediation
Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Data Need	Data User	Parameter	Method	Quantitation Limits	Rationale for Analysis	Data Use
Offsite backfill and topsoil	Remedial action team	VOCs	SW846 8260B	See Worksheet #15 for project QLs	Parameters required by NJAC 7:26D.	Will be used by the remedial action team to verify that offsite backfill and topsoil meet the requirements of the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) prior to bringing the materials to the site
		SVOCs	SW846 8270D			
		Pesticides	SW846 8081B			
		PCBs	SW846 8082A			
		Metals and Mercury	SW846 6010C/7471B			
		Cyanide	SW846 9012B			
		Radiological Parameters	HASL-300 or equivalent gamma spectroscopy method			
Solid waste characterization	Remedial action team, offsite disposal facility	Ignitability	SW846 1010	See Worksheet #15 for project QLs	Parameters required by offsite disposal facility for waste characterization. Laboratory analyses will be performed to meet the requirements of the Pennsylvania Department of Environmental Protection, Bureau of Waste Management, Form U. Additional analyses may be performed at the direction of the offsite disposal facility. Sevenson's Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.	Will be used to characterize the waste for disposal at the appropriate offsite disposal facility
		pH	SW846 9045D SW846 9040C			
		Reactive Cyanide	SW846 Section 7.4.3.2			
		Reactive Sulfide	SW846 Section 7.4.4.3			
		TCLP Metals and Mercury	SW846 6010C/7470A			
		TCLP SVOCs	SW846 8270D			
		TCLP Pesticides	SW846 8081B			
		TCLP Herbicides	SW846 8151A			
		PCBs	SW846 8082A			
		TCLP VOCs	SW-846 8260B			

Data Need	Data User	Parameter	Method	Quantitation Limits	Rationale for Analysis	Data Use
		Oil and Grease	EPA 1664A			
		Ammonia-Nitrogen	SM 4500NH3-D			
		Chemical Oxygen Demand (COD)	SM 5220D			
		Total Volatile Solids	SM 2540G			
		Total Solids	SM 2540B			
		Free Liquids	SW846 9095B			
Liquid waste characterization	Remedial action team, offsite disposal facility	Ignitability	SW846 1010	See Worksheet #15 for project QLs	Parameters required by offsite disposal facility for waste characterization.	Will be used to characterize the waste for disposal at the appropriate offsite disposal facility
		pH	SW846 9045D SW846 9040C			
		Reactive Cyanide	SW846 Section 7.4.3.2			
		Reactive Sulfide	SW846 Section 7.4.4.3			
		TCLP Metals and Mercury	SW846 6010C/7470A			
		TCLP SVOCs	SW846 8270D			
		TCLP Pesticides	SW846 8081B			
		TCLP Herbicides	SW846 8151A			
		PCBs	SW846 8082A			

APPENDIX 3

DATA QUALITY OBJECTIVES

Appendix 3

Data Quality Objectives

Operable Unit 1 – Soil Remediation
Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Data quality objectives (DQOs) are used to help decision makers collect data of the right type, quality, and quantity to support decisions. The approach to developing DQOs is designed to take decision makers through a strategic planning process from broad project goals through a number of refining steps towards generating environmental data that will be appropriate to making the decisions needed to reach the goals.

1.0 State the Problem

Work is being conducted at properties located in the vicinity of the former Cornell-Dubilier Electronics facility due to contamination found in soil associated with past industrial operations conducted at the facility. Elevated concentrations of contaminants of concern in soils, primarily polychlorinated biphenyls (PCBs) may pose a threat through direct contact and as a source of contamination to groundwater.

This task addresses the remediation of soils associated with Operable Unit 1 (OU-1) of the site. The USEPA signed a Record of Decision (ROD) for OU-1 in September 2003. The objectives of the current remedial action are:

- Excavation of an estimated 2,500 cubic yards of contaminated soil, backfilling with clean fill, and property restoration, as necessary.
- Transportation of contaminated soil to an offsite facility for disposal, with treatment as necessary.

2.0 Identify the Decision

To meet the objectives, the following fundamental questions will need to be answered during the investigation:

- Do backfill and topsoil materials brought in from offsite sources pose a risk to human health or the environment?

- What are the disposal facility requirements to classify the soils and debris excavated from the site under Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) regulations?

3.0 Identify the Inputs to the Decision

The following inputs are required to answer the fundamental questions identified in Step 2 above:

- Review existing data. This includes analytical data as well as past practice and process history.
- Determine the appropriate analytical methods, keeping in mind that the methods must meet the sensitivities of the applicable regulatory limits and remediation goals.
- Collect soil samples to fully characterize the soils such that the offsite disposal facilities are satisfied.
- Collect backfill and topsoil samples to demonstrate that materials brought onsite are not hazardous to human health or the environment.

4.0 Define the Boundaries of the Study

The physical boundaries of the investigation have been defined as OU-1.

5.0 Develop a Decision Rule

The purpose of this step is to integrate the outputs from the previous steps into a statement that defines the conditions that would cause the decision makers to choose among alternative actions. The following primary decision rules will be used to answer the fundamental questions:

- Waste characterization sample results will be compared against the 40CFR261 *Characteristics of Hazardous Waste* and 40CFR761 *PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* to determine the disposal requirements. Any materials containing Resource Conservation and Recovery Act (RCRA) regulated constituents at concentrations greater than toxicity characteristic leachate procedure (TCLP) criteria will be disposed of as RCRA hazardous waste. Any materials containing concentrations of total PCBs greater than the regulatory standards will be disposed of as Toxic Substance Control Act (TSCA) regulated PCB remediation wastes. Any materials exceeding both criteria will be disposed of as RCRA/TSCA waste.

- Material used for backfill will be analyzed for organic compounds, inorganic compounds, and radioisotopes to ensure that the fill material does not exceed the cleanup criteria in New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Remediation Standards (RDCSRS) for chemical parameters and NJAC 7:28-12 for naturally occurring radioactive material (NORM).

6.0 Specify Limits on Decision Errors

This step is to specify the decision maker's acceptable limits on decision errors, which are used to establish appropriate performance goals for limiting uncertainty in environmental data. These acceptable limits on decision errors allow decision makers to generate effective sampling designs while limiting uncertainties in the collected data.

There are two types of decision errors applicable to estimating the true value of a population: 1) sampling design error, which occurs when the sampling design is unable to capture the complete state of natural variability over space and time; and 2) measurement error, which refers to a combination of random and systematic errors. The combination of sampling design error and measurement error is termed as the total study error. Since it is impossible to eliminate error in measurement data, two types of decision errors can occur: Type I and Type II. A Type I or false positive error occurs when a null hypothesis is true, but is mistakenly rejected. A Type II or false negative error occurs when a null hypothesis is false, but is not rejected.

In this investigation, the false rejection error is concluding that soils do not contain contaminants of concern with concentrations exceeding the action levels when there are actually contaminants of concern with concentrations that exceeded the action levels. The false acceptance error is concluding that the soils do contain contaminants of concern with concentrations that exceeded the action levels when there are actually no contaminants of concern with concentrations that exceeded the action levels.

The consequences of the false acceptance decision will be unnecessary expenditure of resources such as funding, personnel, and time. The consequence of the false rejection error is that contaminants of concern in soils will not be remediated and will pose unacceptable risk to the environment or human health. Because of the possible severity of the false rejection error consequence, the false acceptance error is more tolerable than the false rejection error. The false acceptance decision error will occur when the

analytical results are biased high and the false rejection decision error will occur when the analytical results are biased low.

7.0 Optimize the Design for Obtaining Data

This step involves identifying the most resource effective sampling and analysis design for generating data that are expected to satisfy project DQOs.

The consequence of the decision error will need to be balanced against the cost of limiting the possibility of these errors. These errors will be managed by the use of precise and accurate analytical methods, sampling techniques (e.g., compositing for waste characterization), and duplicate sample analysis. To minimize unacceptable errors, laboratory analyses with a high degree of confidence and extensive quality assurance and quality control (QA/QC) and documentation procedures will be utilized.

APPENDIX 4

MEASUREMENT PERFORMANCE CRITERIA

Project Target Analyte Reporting Limit, Blank Contamination, and Lab & Field Duplicate RPD Criteria

eQapp Name: Cornell_OU1_Spectrum (071012)
Description: Cornell_OU1_Spectrum (created 071012)

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 160.3	**Matrix: AQ**							
TOTAL SOLIDS		TSO	4.0		mg/L	5.00	20.00	35.00
Method: 1664A	**Matrix: AQ**							
OIL & GREASE		OILGREASE	5.0		mg/L	5.00	18.00	35.00
Method: 6010B	**Matrix: SO**							
ALUMINUM		7429-90-5	10		mg/Kg	5.00	20.00	35.00
ANTIMONY		7440-36-0	1		mg/Kg	5.00	20.00	35.00
ARSENIC		7440-38-2	1		mg/Kg	5.00	20.00	35.00
BARIUM		7440-39-3	10		mg/Kg	5.00	20.00	35.00
BERYLLIUM		7440-41-7	0.25		mg/Kg	5.00	20.00	35.00
CADMIUM		7440-43-9	0.25		mg/Kg	5.00	20.00	35.00
CALCIUM		7440-70-2	40		mg/Kg	5.00	20.00	35.00
CHROMIUM		7440-47-3	1		mg/Kg	5.00	20.00	35.00
COBALT		7440-48-4	2.5		mg/Kg	5.00	20.00	35.00
COPPER		7440-50-8	1.5		mg/Kg	5.00	20.00	35.00
IRON		7439-89-6	150		mg/Kg	5.00	20.00	35.00
LEAD		7439-92-1	0.5		mg/Kg	5.00	20.00	35.00
MAGNESIUM		7439-95-4	50		mg/Kg	5.00	20.00	35.00
MANGANESE		7439-96-5	2.5		mg/Kg	5.00	20.00	35.00
NICKEL		7440-02-0	2.5		mg/Kg	5.00	20.00	35.00
POTASSIUM		7440-09-7	50		mg/Kg	5.00	20.00	35.00
SELENIUM		7782-49-2	1.5		mg/Kg	5.00	20.00	35.00
SILVER		7440-22-4	1.5		mg/Kg	5.00	20.00	35.00
SODIUM		7440-23-5	50		mg/Kg	5.00	20.00	35.00
THALLIUM		7440-28-0	1		mg/Kg	5.00	20.00	35.00
VANADIUM		7440-62-2	2.5		mg/Kg	5.00	20.00	35.00
ZINC		7440-66-6	2.5		mg/Kg	5.00	20.00	35.00
Method: 6010B-TCLP	**Matrix: SO**							

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 6010B-TCLP	**Matrix: SO**							
ARSENIC		7440-38-2	20		ug/L	5.00	20.00	35.00
BARIUM		7440-39-3	200		ug/L	5.00	20.00	35.00
CADMIUM		7440-43-9	5		ug/L	5.00	20.00	35.00
CHROMIUM		7440-47-3	20		ug/L	5.00	20.00	35.00
LEAD		7439-92-1	10		ug/L	5.00	20.00	35.00
SELENIUM		7782-49-2	30		ug/L	5.00	20.00	35.00
SILVER		7440-22-4	30		ug/L	5.00	20.00	35.00
Method: 7470A-TCLP	**Matrix: SO**							
MERCURY		7439-97-6	0.20		ug/L	5.00	20.00	35.00
Method: 7471A	**Matrix: SO**							
MERCURY		7439-97-6	0.033		mg/Kg	5.00	20.00	35.00
Method: 8081A	**Matrix: SO**							
4,4'-DDD		72-54-8	3.3		ug/Kg	5.00		35.00
4,4'-DDE		72-55-9	3.3		ug/Kg	5.00		35.00
4,4'-DDT		50-29-3	3.3		ug/Kg	5.00		35.00
ALDRIN		309-00-2	1.7		ug/Kg	5.00		35.00
ALPHA-BHC		319-84-6	1.7		ug/Kg	5.00		35.00
ALPHA-CHLORDANE		5103-71-9	1.7		ug/Kg	5.00		35.00
BETA-BHC		319-85-7	1.7		ug/Kg	5.00		35.00
DELTA-BHC		319-86-8	1.7		ug/Kg	5.00		35.00
DIELDRIN		60-57-1	3.3		ug/Kg	5.00		35.00
ENDOSULFAN I		959-98-8	1.7		ug/Kg	5.00		35.00
ENDOSULFAN II		33213-65-9	3.3		ug/Kg	5.00		35.00
ENDOSULFAN SULFATE		1031-07-8	3.3		ug/Kg	5.00		35.00
ENDRIN		72-20-8	3.3		ug/Kg	5.00		35.00
ENDRIN ALDEHYDE		7421-93-4	3.3		ug/Kg	5.00		35.00
ENDRIN KETONE		53494-70-5	3.3		ug/Kg	5.00		35.00
GAMMA-BHC		58-89-9	1.7		ug/Kg	5.00		35.00
GAMMA-CHLORDANE		5103-74-2	1.7		ug/Kg	5.00		35.00
HEPTACHLOR		76-44-8	1.7		ug/Kg	5.00		35.00
HEPTACHLOR EPOXIDE		1024-57-3	1.7		ug/Kg	5.00		35.00
METHOXYCHLOR		72-43-5	17		ug/Kg	5.00		35.00

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8081A	**Matrix: SO**							
TOXAPHENE		8001-35-2	170		ug/Kg	5.00		35.00
Method: 8081A-TCLP	**Matrix: SO**							
CHLORDANE (TECHNICAL)		57-74-9	2.5		ug/L	5.00	25.00	35.00
ENDRIN		72-20-8	0.1		ug/L	5.00	30.00	35.00
GAMMA-BHC		58-89-9	0.05		ug/L	5.00	30.00	35.00
HEPTACHLOR		76-44-8	0.05		ug/L	5.00	30.00	35.00
HEPTACHLOR EPOXIDE		1024-57-3	0.05		ug/L	5.00	30.00	35.00
METHOXYCHLOR		72-43-5	0.5		ug/L	5.00	30.00	35.00
TOXAPHENE		8001-35-2	5		ug/L	5.00	25.00	35.00
Method: 8082	**Matrix: SO**							
AROCLOR 1016		12674-11-2	33		ug/Kg	5.00		35.00
AROCLOR 1221		11104-28-2	33		ug/Kg	5.00		35.00
AROCLOR 1232		11141-16-5	33		ug/Kg	5.00		35.00
AROCLOR 1242		53469-21-9	33		ug/Kg	5.00		35.00
AROCLOR 1248		12672-29-6	33		ug/Kg	5.00		35.00
AROCLOR 1254		11097-69-1	33		ug/Kg	5.00		35.00
AROCLOR 1260		11096-82-5	33		ug/Kg	5.00		35.00
Method: 8151A-TCLP	**Matrix: SO**							
2,4,5-TP		93-72-1	0.33		ug/L	5.00	30.00	35.00
2,4-D		94-75-7	3.3		ug/L	5.00	30.00	35.00
Method: 8260B	**Matrix: SO**							
1,1,1,2-TETRACHLOROETHANE		630-20-6	5		ug/Kg	5.00		35.00
1,1,1-TRICHLOROETHANE		71-55-6	5		ug/Kg	5.00		35.00
1,1,2,2-TETRACHLOROETHANE		79-34-5	5		ug/Kg	5.00		35.00
1,1,2-TRICHLOROETHANE		79-00-5	5		ug/Kg	5.00		35.00
1,1-DICHLOROETHANE		75-34-3	5		ug/Kg	5.00		35.00
1,1-DICHLOROETHENE		75-35-4	5		ug/Kg	5.00		35.00
1,1-DICHLOROPROPENE		563-58-6	5		ug/Kg	5.00		35.00
1,2,3-TRICHLOROBENZENE		87-61-6	5		ug/Kg	5.00		35.00
1,2,3-TRICHLOROPROPANE		96-18-4	5		ug/Kg	5.00		35.00
1,2,4-TRICHLOROBENZENE		120-82-1	5		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B **Matrix: SO**							
1,2,4-TRIMETHYLBENZENE	95-63-6	5		ug/Kg	5.00		35.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5		ug/Kg	5.00		35.00
1,2-DIBROMOETHANE	106-93-4	5		ug/Kg	5.00		35.00
1,2-DICHLOROBENZENE	95-50-1	5		ug/Kg	5.00		35.00
1,2-DICHLOROETHANE	107-06-2	5		ug/Kg	5.00		35.00
1,2-DICHLOROPROPANE	78-87-5	5		ug/Kg	5.00		35.00
1,3,5-TRIMETHYLBENZENE	108-67-8	5		ug/Kg	5.00		35.00
1,3-DICHLOROBENZENE	541-73-1	5		ug/Kg	5.00		35.00
1,3-DICHLOROPROPANE	142-28-9	5		ug/Kg	5.00		35.00
1,4-DICHLOROBENZENE	106-46-7	5		ug/Kg	5.00		35.00
2,2-DICHLOROPROPANE	594-20-7	5		ug/Kg	5.00		35.00
2-BUTANONE	78-93-3	5		ug/Kg	5.00		35.00
2-CHLOROTOLUENE	95-49-8	5		ug/Kg	5.00		35.00
2-HEXANONE	591-78-6	5		ug/Kg	5.00		35.00
4-CHLOROTOLUENE	106-43-4	5		ug/Kg	5.00		35.00
4-ISOPROPYLTOLUENE	99-87-6	5		ug/Kg	5.00		35.00
4-METHYL-2-PENTANONE	108-10-1	5		ug/Kg	5.00		35.00
ACETONE	67-64-1	5		ug/Kg	10.00		35.00
ACROLEIN	107-02-8	25		ug/Kg	5.00		35.00
ACRYLONITRILE	107-13-1	5		ug/Kg	5.00		35.00
BENZENE	71-43-2	5		ug/Kg	5.00		35.00
BROMOBENZENE	108-86-1	5		ug/Kg	5.00		35.00
BROMOCHLOROMETHANE	74-97-5	5		ug/Kg	5.00		35.00
BROMODICHLOROMETHANE	75-27-4	5		ug/Kg	5.00		35.00
BROMOFORM	75-25-2	5		ug/Kg	5.00		35.00
BROMOMETHANE	74-83-9	5		ug/Kg	5.00		35.00
CARBON DISULFIDE	75-15-0	5		ug/Kg	5.00		35.00
CARBON TETRACHLORIDE	56-23-5	5		ug/Kg	5.00		35.00
CHLOROBENZENE	108-90-7	5		ug/Kg	5.00		35.00
CHLOROETHANE	75-00-3	5		ug/Kg	5.00		35.00
CHLOROFORM	67-66-3	5		ug/Kg	5.00		35.00
CHLOROMETHANE	74-87-3	5		ug/Kg	5.00		35.00
CIS-1,2-DICHLOROETHENE	156-59-2	5		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B Matrix: SO							
CIS-1,3-DICHLOROPROPENE	10061-01-5	5		ug/Kg	5.00		35.00
DIBROMOCHLOROMETHANE	124-48-1	5		ug/Kg	5.00		35.00
DIBROMOMETHANE	74-95-3	5		ug/Kg	5.00		35.00
DICHLORODIFLUOROMETHANE	75-71-8	5		ug/Kg	5.00		35.00
ETHYLBENZENE	100-41-4	5		ug/Kg	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	5		ug/Kg	5.00		35.00
IODOMETHANE	74-88-4	5		ug/Kg	5.00		35.00
ISOPROPYLBENZENE	98-82-8	5		ug/Kg	5.00		35.00
m,p-xylene	108-38-3	5		ug/Kg	5.00		35.00
METHYL ACETATE	79-20-9	5		ug/Kg	5.00		35.00
METHYLENE CHLORIDE	75-09-2	5		ug/Kg	10.00		35.00
methyl-t-butyl ether	1634-04-4	5		ug/Kg	5.00		35.00
NAPHTHALENE	91-20-3	5		ug/Kg	5.00		35.00
N-BUTYLBENZENE	104-51-8	5		ug/Kg	5.00		35.00
N-PROPYLBENZENE	103-65-1	5		ug/Kg	5.00		35.00
O-XYLENE	95-47-6	5		ug/Kg	5.00		35.00
SEC-BUTYLBENZENE	135-98-8	5		ug/Kg	5.00		35.00
STYRENE	100-42-5	5		ug/Kg	5.00		35.00
TERT-BUTYL ALCOHOL	75-65-0	10		ug/Kg	5.00		35.00
TERT-BUTYLBENZENE	98-06-6	5		ug/Kg	5.00		35.00
TETRACHLOROETHENE	127-18-4	5		ug/Kg	5.00		35.00
TOLUENE	108-88-3	5		ug/Kg	5.00		35.00
TRANS-1,2-DICHLOROETHENE	156-60-5	5		ug/Kg	5.00		35.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	5		ug/Kg	5.00		35.00
TRICHLOROETHENE	79-01-6	5		ug/Kg	5.00		35.00
TRICHLOROFLUOROMETHANE	75-69-4	5		ug/Kg	5.00		35.00
VINYL ACETATE	108-05-4	5		ug/Kg	5.00		35.00
VINYL CHLORIDE	75-01-4	5		ug/Kg	5.00		35.00
Xylene (Total)	1330-20-7	5		ug/Kg	5.00		35.00
Method: 8260B-TCLP Matrix: SO							
1,1-DICHLOROETHENE	75-35-4	5		ug/L	5.00	40.00	40.00
1,2-DICHLOROETHANE	107-06-2	5		ug/L	5.00	40.00	40.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B-TCLP Matrix: SO							
1,4-DICHLOROBENZENE	106-46-7	5		ug/L	5.00	40.00	40.00
2-BUTANONE	78-93-3	5		ug/L	10.00	40.00	40.00
BENZENE	71-43-2	5		ug/L	5.00	40.00	40.00
CARBON TETRACHLORIDE	56-23-5	5		ug/L	5.00	40.00	40.00
CHLOROBENZENE	108-90-7	5		ug/L	5.00	40.00	40.00
CHLOROFORM	67-66-3	5		ug/L	5.00	40.00	40.00
TETRACHLOROETHENE	127-18-4	5		ug/L	5.00	40.00	40.00
TRICHLOROETHENE	79-01-6	5		ug/L	5.00	40.00	40.00
VINYL CHLORIDE	75-01-4	5		ug/L	5.00	40.00	40.00
Method: 8270C Matrix: SO							
1,1'-Biphenyl	92-52-4	330		ug/Kg	5.00		35.00
1,2,4,5-TETRACHLOROBENZENE	95-94-3	330		ug/Kg	5.00		35.00
1,2,4-TRICHLOROBENZENE	120-82-1	330		ug/Kg	5.00		35.00
1,2-DICHLOROBENZENE	95-50-1	330		ug/Kg	5.00		35.00
1,2-DIPHENYLHYDRAZINE	122-66-7	330		ug/Kg	5.00		35.00
1,3-DICHLOROBENZENE	541-73-1	330		ug/Kg	5.00		35.00
1,4-DICHLOROBENZENE	106-46-7	330		ug/Kg	5.00		35.00
2,4,5-TRICHLOROPHENOL	95-95-4	670		ug/Kg	5.00		35.00
2,4,6-TRICHLOROPHENOL	88-06-2	330		ug/Kg	5.00		35.00
2,4-DICHLOROPHENOL	120-83-2	330		ug/Kg	5.00		35.00
2,4-DIMETHYLPHENOL	105-67-9	330		ug/Kg	5.00		35.00
2,4-DINITROPHENOL	51-28-5	670		ug/Kg	5.00		35.00
2,4-DINITROTOLUENE	121-14-2	330		ug/Kg	5.00		35.00
2,6-DINITROTOLUENE	606-20-2	330		ug/Kg	5.00		35.00
2-CHLORONAPHTHALENE	91-58-7	330		ug/Kg	5.00		35.00
2-CHLOROPHENOL	95-57-8	330		ug/Kg	5.00		35.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	670		ug/Kg	5.00		35.00
2-METHYLNAPHTHALENE	91-57-6	330		ug/Kg	5.00		35.00
2-METHYLPHENOL	95-48-7	330		ug/Kg	5.00		35.00
2-NITROANILINE	88-74-4	670		ug/Kg	5.00		35.00
2-NITROPHENOL	88-75-5	330		ug/Kg	5.00		35.00
3,3'-DICHLOROBENZIDINE	91-94-1	330		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C Matrix: SO							
3-NITROANILINE	99-09-2	670		ug/Kg	5.00		35.00
4-BROMOPHENYL PHENYL ETHER	101-55-3	330		ug/Kg	5.00		35.00
4-CHLORO-3-METHYLPHENOL	59-50-7	330		ug/Kg	5.00		35.00
4-CHLOROANILINE	106-47-8	330		ug/Kg	5.00		35.00
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	330		ug/Kg	5.00		35.00
4-METHYLPHENOL	106-44-5	330		ug/Kg	5.00		35.00
4-NITROANILINE	100-01-6	670		ug/Kg	5.00		35.00
4-NITROPHENOL	100-02-7	670		ug/Kg	5.00		35.00
ACENAPHTHENE	83-32-9	330		ug/Kg	5.00		35.00
ACENAPHTHYLENE	208-96-8	330		ug/Kg	5.00		35.00
ACETOPHENONE	98-86-2	330		ug/Kg	5.00		35.00
ANTHRACENE	120-12-7	330		ug/Kg	5.00		35.00
ATRAZINE	1912-24-9	330		ug/Kg	5.00		35.00
Azobenzene	103-33-3	330		ug/Kg	5.00		35.00
BENZALDEHYDE	100-52-7	330		ug/Kg	5.00		35.00
BENZIDINE	92-87-5	330		ug/Kg	5.00		35.00
BENZO(A)ANTHRACENE	56-55-3	330		ug/Kg	5.00		35.00
BENZO(A)PYRENE	50-32-8	330		ug/Kg	5.00		35.00
BENZO(B)FLUORANTHENE	205-99-2	330		ug/Kg	5.00		35.00
BENZO(G,H,I)PERYLENE	191-24-2	330		ug/Kg	5.00		35.00
BENZO(K)FLUORANTHENE	207-08-9	330		ug/Kg	5.00		35.00
BIS(2-CHLOROETHOXY)METHANE	111-91-1	330		ug/Kg	5.00		35.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	330		ug/Kg	5.00		35.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	330		ug/Kg	5.00		35.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	330		ug/Kg	5.00		35.00
BUTYLBENZYL PHTHALATE	85-68-7	330		ug/Kg	5.00		35.00
CAPROLACTAM	105-60-2	330		ug/Kg	5.00		35.00
CARBAZOLE	86-74-8	330		ug/Kg	5.00		35.00
CHRYSENE	218-01-9	330		ug/Kg	5.00		35.00
DIBENZ(A,H)ANTHRACENE	53-70-3	330		ug/Kg	5.00		35.00
DIBENZOFURAN	132-64-9	330		ug/Kg	5.00		35.00
DIETHYL PHTHALATE	84-66-2	330		ug/Kg	5.00		35.00
DIMETHYL PHTHALATE	131-11-3	330		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C Matrix: SO							
DI-N-BUTYL PHTHALATE	84-74-2	330		ug/Kg	5.00		35.00
DI-N-OCTYL PHTHALATE	117-84-0	330		ug/Kg	5.00		35.00
FLUORANTHENE	206-44-0	330		ug/Kg	5.00		35.00
FLUORENE	86-73-7	330		ug/Kg	5.00		35.00
HEXACHLOROBENZENE	118-74-1	330		ug/Kg	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	330		ug/Kg	5.00		35.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	330		ug/Kg	5.00		35.00
HEXACHLOROETHANE	67-72-1	330		ug/Kg	5.00		35.00
INDENO(1,2,3-CD)PYRENE	193-39-5	330		ug/Kg	5.00		35.00
ISOPHORONE	78-59-1	330		ug/Kg	5.00		35.00
NAPHTHALENE	91-20-3	330		ug/Kg	5.00		35.00
NITROBENZENE	98-95-3	330		ug/Kg	5.00		35.00
N-NITROSODIMETHYLAMINE	62-75-9	330		ug/Kg	5.00		35.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	330		ug/Kg	5.00		35.00
N-NITROSODIPHENYLAMINE	86-30-6	330		ug/Kg	5.00		35.00
PENTACHLOROPHENOL	87-86-5	670		ug/Kg	5.00		35.00
PHENANTHRENE	85-01-8	330		ug/Kg	5.00		35.00
PHENOL	108-95-2	330		ug/Kg	5.00		35.00
PYRENE	129-00-0	330		ug/Kg	5.00		35.00
Method: 8270C-TCLP Matrix: SO							
1,4-DICHLOROBENZENE	106-46-7	33		ug/L	5.00		35.00
2,4,5-TRICHLOROPHENOL	95-95-4	66		ug/L	5.00		35.00
2,4,6-TRICHLOROPHENOL	88-06-2	33		ug/L	5.00		35.00
2,4-DINITROTOLUENE	121-14-2	33		ug/L	5.00		35.00
2-METHYLPHENOL	95-48-7	33		ug/L	5.00		35.00
3&4-Methylphenol	106-44-5	33		ug/L	5.00		35.00
HEXACHLOROBENZENE	118-74-1	33		ug/L	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	33		ug/L	5.00		35.00
HEXACHLOROETHANE	67-72-1	33		ug/L	5.00		35.00
NITROBENZENE	98-95-3	33		ug/L	5.00		35.00
PENTACHLOROPHENOL	87-86-5	66		ug/L	5.00		35.00
PYRIDINE	110-86-1	33		ug/L	5.00		35.00

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 9012	Matrix: SO							
CYANIDE		57-12-5	1.0		mg/Kg	5.00	20.00	35.00
Method: 9045	Matrix: SO							
pH		ADR-04-001	1		pH	5.00	20.00	35.00
Method: DOE 4.5.2.3	Matrix: SO							
Ac-228		14331-83-0	0.1		pCi/g	5.00	3.92	50.00
Bi-212		14913-49-6	0.1		pCi/g	5.00	3.92	50.00
Bi-214		14733-03-0	0.1		pCi/g	5.00	3.92	50.00
K-40		13966-00-2	0.1		pCi/g	5.00	3.92	50.00
Pa-234m		15100-28-4	0.1		pCi/g	5.00	3.92	50.00
Pb-212		15092-94-1	0.1		pCi/g	5.00	3.92	50.00
Pb-214		15067-28-4	0.1		pCi/g	5.00	3.92	50.00
Ra-226		13982-63-3	0.1		pCi/g	5.00	3.92	50.00
Ra-228		15262-20-1	0.1		pCi/g	5.00	3.92	50.00
Th-234		15065-10-8	0.1		pCi/g	5.00	3.92	50.00
Thorium-232		7440-29-1	0.1		pCi/g	5.00	3.92	50.00
Tl-208		14913-50-9	0.1		pCi/g	5.00	3.92	50.00
U-235		15117-96-1	0.1		pCi/g	5.00	3.92	50.00
Method: EPA 1010	Matrix: SO							
IGNITABILITY		10-36-6	200		deg F	5.00	25.00	25.00
Method: SM 2540B	Matrix: AQ							
TOTAL SOLIDS		TSO						
Method: SM 2540G	Matrix: SO							
TOTAL VOLATILE SOLIDS		TVS			PERCENT	5.00	0.00	0.00
Method: SM 4500-H+ B	Matrix: AQ							
pH		ADR-04-001	1		pH	5.00	20.00	50.00
Method: SM 4500-NH3 D	Matrix: AQ							
AMMONIA AS N		7664-41-7	0.20		mg/L	5.00	20.00	35.00
Method: SM 5220D	Matrix: AQ							
CHEMICAL OXYGEN DEMAND		COD	20		mg/L	5.00	20.00	35.00

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: SW846_7.3.1	**Matrix: SO**							
Reactive Cyanide		57-12-5	1		mg/kg	5.00	20.00	50.00
Method: SW846_7.3.2	**Matrix: SO**							
Reactive Sulfide		18496-25-8	1		mg/kg	5.00	20.00	50.00

Project Accuracy and Precision Report

eQapp Name: Cornell_OU1_Spectrum (071012)
Description: Cornell_OU1_Spectrum (created 071012)

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 160.3 **Matrix:** AQ						
QC Type: LCS						
TOTAL SOLIDS	TSO	50.00	80.00	120.00		
Method: 1664A **Matrix:** AQ						
QC Type: LCS						
OIL & GREASE	OILGREASE	10.00	78.00	114.00		18.00
QC Type: MS						
OIL & GREASE	OILGREASE	10.00	78.00	114.00		18.00
Method: 6010B **Matrix:** SO						
QC Type: LCS						
ALUMINUM	7429-90-5	10.00	80.00	120.00		
ANTIMONY	7440-36-0	10.00	80.00	120.00		
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
BERYLLIUM	7440-41-7	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CALCIUM	7440-70-2	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
COBALT	7440-48-4	10.00	80.00	120.00		
COPPER	7440-50-8	10.00	80.00	120.00		
IRON	7439-89-6	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
MAGNESIUM	7439-95-4	10.00	80.00	120.00		
MANGANESE	7439-96-5	10.00	80.00	120.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 6010B	Matrix: SO					
QC Type: LCS						
NICKEL	7440-02-0	10.00	80.00	120.00		
POTASSIUM	7440-09-7	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	75.00	120.00		
SODIUM	7440-23-5	10.00	80.00	120.00		
THALLIUM	7440-28-0	10.00	80.00	120.00		
VANADIUM	7440-62-2	10.00	80.00	120.00		
ZINC	7440-66-6	10.00	80.00	120.00		
QC Type: MS						
ALUMINUM	7429-90-5	10.00	75.00	125.00		
ANTIMONY	7440-36-0	10.00	75.00	125.00		
ARSENIC	7440-38-2	10.00	75.00	125.00		
BARIUM	7440-39-3	10.00	75.00	125.00		
BERYLLIUM	7440-41-7	10.00	75.00	125.00		
CADMIUM	7440-43-9	10.00	75.00	125.00		
CALCIUM	7440-70-2	10.00	75.00	125.00		
CHROMIUM	7440-47-3	10.00	75.00	125.00		
COBALT	7440-48-4	10.00	75.00	125.00		
COPPER	7440-50-8	10.00	75.00	125.00		
IRON	7439-89-6	10.00	75.00	125.00		
LEAD	7439-92-1	10.00	75.00	125.00		
MAGNESIUM	7439-95-4	10.00	75.00	125.00		
MANGANESE	7439-96-5	10.00	75.00	125.00		
NICKEL	7440-02-0	10.00	75.00	125.00		
POTASSIUM	7440-09-7	10.00	75.00	125.00		
SELENIUM	7782-49-2	10.00	75.00	125.00		
SILVER	7440-22-4	10.00	75.00	125.00		
SODIUM	7440-23-5	10.00	75.00	125.00		
THALLIUM	7440-28-0	10.00	75.00	125.00		
VANADIUM	7440-62-2	10.00	75.00	125.00		
ZINC	7440-66-6	10.00	75.00	125.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 6010B-TCLP	**Matrix: SO**					
QC Type: LCS						
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	80.00	120.00		
QC Type: MS						
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	80.00	120.00		
Method: 7470A-TCLP	**Matrix: SO**					
QC Type: LCS						
MERCURY	7439-97-6	10.00	80.00	120.00		
QC Type: MS						
MERCURY	7439-97-6	10.00	80.00	120.00		
Method: 7471A	**Matrix: SO**					
QC Type: LCS						
MERCURY	7439-97-6	10.00	80.00	120.00		
QC Type: MS						
MERCURY	7439-97-6	10.00	80.00	120.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A	**Matrix: SO**					
QC Type: LCS						
4,4'-DDD	72-54-8	10.00	30.00	135.00		30.00
4,4'-DDE	72-55-9	10.00	70.00	125.00		30.00
4,4'-DDT	50-29-3	10.00	45.00	140.00		30.00
ALDRIN	309-00-2	10.00	45.00	140.00		30.00
ALPHA-BHC	319-84-6	10.00	60.00	125.00		30.00
ALPHA-CHLORDANE	5103-71-9	10.00	65.00	120.00		30.00
BETA-BHC	319-85-7	10.00	60.00	125.00		30.00
DELTA-BHC	319-86-8	10.00	55.00	130.00		30.00
DIELDRIN	60-57-1	10.00	65.00	125.00		30.00
ENDOSULFAN I	959-98-8	10.00	15.00	135.00		30.00
ENDOSULFAN II	33213-65-9	10.00	35.00	140.00		30.00
ENDOSULFAN SULFATE	1031-07-8	10.00	60.00	135.00		30.00
ENDRIN	72-20-8	10.00	60.00	135.00		30.00
ENDRIN ALDEHYDE	7421-93-4	10.00	35.00	145.00		30.00
ENDRIN KETONE	53494-70-5	10.00	65.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	60.00	125.00		30.00
GAMMA-CHLORDANE	5103-74-2	10.00	65.00	125.00		30.00
HEPTACHLOR	76-44-8	10.00	50.00	140.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	65.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	145.00		30.00
QC Type: MS						
4,4'-DDD	72-54-8	10.00	30.00	135.00		30.00
4,4'-DDE	72-55-9	10.00	70.00	125.00		30.00
4,4'-DDT	50-29-3	10.00	45.00	140.00		30.00
ALDRIN	309-00-2	10.00	45.00	140.00		30.00
ALPHA-BHC	319-84-6	10.00	60.00	125.00		30.00
ALPHA-CHLORDANE	5103-71-9	10.00	65.00	120.00		30.00
BETA-BHC	319-85-7	10.00	60.00	125.00		30.00
DELTA-BHC	319-86-8	10.00	55.00	130.00		30.00
DIELDRIN	60-57-1	10.00	65.00	125.00		30.00
ENDOSULFAN I	959-98-8	10.00	15.00	135.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A	**Matrix: SO**					
QC Type: MS						
ENDOSULFAN II	33213-65-9	10.00	35.00	140.00		30.00
ENDOSULFAN SULFATE	1031-07-8	10.00	60.00	135.00		30.00
ENDRIN	72-20-8	10.00	60.00	135.00		30.00
ENDRIN ALDEHYDE	7421-93-4	10.00	35.00	145.00		30.00
ENDRIN KETONE	53494-70-5	10.00	65.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	60.00	125.00		30.00
GAMMA-CHLORDANE	5103-74-2	10.00	65.00	120.00		30.00
HEPTACHLOR	76-44-8	10.00	50.00	140.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	65.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	145.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	55.00	130.00		
Tetrachloro-meta-xylene	877-09-8	10.00	14.00	113.00		
Method: 8081A-TCLP	**Matrix: SO**					
QC Type: LCS						
ENDRIN	72-20-8	10.00	55.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	25.00	135.00		30.00
HEPTACHLOR	76-44-8	10.00	40.00	130.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	60.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	150.00		30.00
QC Type: MS						
ENDRIN	72-20-8	10.00	55.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	25.00	135.00		30.00
HEPTACHLOR	76-44-8	10.00	40.00	130.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	60.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	150.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A-TCLP	**Matrix: SO**					
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	40.00	135.00		
TETRACHLORO-M-XYLENE	877-09-8	10.00	32.00	89.00		
Method: 8082	**Matrix: SO**					
QC Type: LCS						
AROCLOR 1016	12674-11-2	10.00	40.00	140.00		30.00
AROCLOR 1260	11096-82-5	10.00	60.00	130.00		30.00
QC Type: MS						
AROCLOR 1016	12674-11-2	10.00	40.00	140.00		30.00
AROCLOR 1260	11096-82-5	10.00	60.00	130.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	60.00	125.00		
TETRACHLORO-M-XYLENE	877-09-8	10.00	27.00	120.00		
Method: 8151A-TCLP	**Matrix: SO**					
QC Type: LCS						
2,4,5-TP	93-72-1	10.00	36.00	136.00		30.00
2,4-D	94-75-7	10.00	24.00	133.00		30.00
QC Type: MS						
2,4,5-TP	93-72-1	10.00	36.00	136.00		30.00
2,4-D	94-75-7	10.00	24.00	133.00		30.00
QC Type: SURR						
2,4-DCPAA	19719-28-9	10.00	10.00	105.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	Matrix: SO					
QC Type: LCS						
1,1,1,2-TETRACHLOROETHANE	630-20-6	10.00	75.00	125.00		40.00
1,1,1-TRICHLOROETHANE	71-55-6	10.00	70.00	135.00		40.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.00	55.00	130.00		40.00
1,1,2-TRICHLOROETHANE	79-00-5	10.00	60.00	125.00		40.00
1,1-DICHLOROETHANE	75-34-3	10.00	75.00	125.00		40.00
1,1-DICHLOROETHENE	75-35-4	10.00	65.00	135.00		40.00
1,1-DICHLOROPROPENE	563-58-6	10.00	70.00	135.00		40.00
1,2,3-TRICHLOROBENZENE	87-61-6	10.00	60.00	135.00		40.00
1,2,3-TRICHLOROPROPANE	96-18-4	10.00	65.00	130.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	65.00	130.00		40.00
1,2,4-TRIMETHYLBENZENE	95-63-6	10.00	65.00	135.00		40.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	10.00	40.00	135.00		40.00
1,2-DIBROMOETHANE	106-93-4	10.00	70.00	125.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	75.00	120.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	135.00		40.00
1,2-DICHLOROPROPANE	78-87-5	10.00	70.00	120.00		40.00
1,3,5-TRIMETHYLBENZENE	108-67-8	10.00	65.00	135.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	70.00	125.00		40.00
1,3-DICHLOROPROPANE	142-28-9	10.00	75.00	125.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	70.00	125.00		40.00
2,2-DICHLOROPROPANE	594-20-7	10.00	65.00	135.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	160.00		40.00
2-CHLOROTOLUENE	95-49-8	10.00	70.00	130.00		40.00
2-HEXANONE	591-78-6	10.00	45.00	145.00		40.00
4-CHLOROTOLUENE	106-43-4	10.00	75.00	125.00		40.00
4-ISOPROPYLTOLUENE	99-87-6	10.00	75.00	135.00		40.00
4-METHYL-2-PENTANONE	108-10-1	10.00	45.00	145.00		40.00
ACETONE	67-64-1	10.00	20.00	160.00		40.00
ACROLEIN	107-02-8	10.00	70.00	130.00		40.00
ACRYLONITRILE	107-13-1	10.00	70.00	130.00		40.00
BENZENE	71-43-2	10.00	75.00	125.00		40.00
BROMOBENZENE	108-86-1	10.00	65.00	120.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B Matrix: SO						
QC Type: LCS						
BROMOCHLOROMETHANE	74-97-5	10.00	70.00	125.00		40.00
BROMODICHLOROMETHANE	75-27-4	10.00	70.00	130.00		40.00
BROMOFORM	75-25-2	10.00	55.00	135.00		40.00
BROMOMETHANE	74-83-9	10.00	30.00	160.00		40.00
CARBON DISULFIDE	75-15-0	10.00	45.00	160.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	135.00		40.00
CHLOROBENZENE	108-90-7	10.00	75.00	125.00		40.00
CHLOROETHANE	75-00-3	10.00	40.00	155.00		40.00
CHLOROFORM	67-66-3	10.00	70.00	125.00		40.00
CHLOROMETHANE	74-87-3	10.00	50.00	130.00		40.00
CIS-1,2-DICHLOROETHENE	156-59-2	10.00	65.00	125.00		40.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.00	70.00	125.00		40.00
DIBROMOCHLOROMETHANE	124-48-1	10.00	65.00	130.00		40.00
DIBROMOMETHANE	74-95-3	10.00	75.00	130.00		40.00
DICHLORODIFLUOROMETHANE	75-71-8	10.00	35.00	135.00		40.00
ETHYLBENZENE	100-41-4	10.00	75.00	125.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	55.00	140.00		40.00
IODOMETHANE	74-88-4	10.00	70.00	126.00		40.00
ISOPROPYLBENZENE	98-82-8	10.00	75.00	130.00		40.00
m,p-xylene	108-38-3	10.00	80.00	125.00		40.00
METHYL ACETATE	79-20-9	10.00	70.00	130.00		40.00
METHYLENE CHLORIDE	75-09-2	10.00	55.00	140.00		40.00
methyl-t-butyl ether	1634-04-4	10.00	75.00	126.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	125.00		40.00
N-BUTYLBENZENE	104-51-8	10.00	65.00	140.00		40.00
N-PROPYLBENZENE	103-65-1	10.00	65.00	135.00		40.00
O-XYLENE	95-47-6	10.00	75.00	125.00		40.00
SEC-BUTYLBENZENE	135-98-8	10.00	65.00	130.00		40.00
STYRENE	100-42-5	10.00	75.00	125.00		40.00
TERT-BUTYL ALCOHOL	75-65-0	10.00	50.00	130.00		40.00
TERT-BUTYLBENZENE	98-06-6	10.00	65.00	130.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	65.00	140.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: LCS						
TOLUENE	108-88-3	10.00	70.00	125.00		40.00
TRANS-1,2-DICHLOROETHENE	156-60-5	10.00	65.00	135.00		40.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.00	65.00	125.00		40.00
TRICHLOROETHENE	79-01-6	10.00	75.00	125.00		40.00
TRICHLOROFLUOROMETHANE	75-69-4	10.00	25.00	185.00		40.00
VINYL ACETATE	108-05-4	10.00	65.00	138.00		40.00
VINYL CHLORIDE	75-01-4	10.00	60.00	125.00		40.00
Xylene (Total)	1330-20-7	10.00	83.00	125.00		40.00
QC Type: MS						
1,1,1,2-TETRACHLOROETHANE	630-20-6	10.00	75.00	125.00		40.00
1,1,1-TRICHLOROETHANE	71-55-6	10.00	70.00	135.00		40.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.00	55.00	130.00		40.00
1,1,2-TRICHLOROETHANE	79-00-5	10.00	60.00	125.00		40.00
1,1-DICHLOROETHANE	75-34-3	10.00	75.00	125.00		40.00
1,1-DICHLOROETHENE	75-35-4	10.00	65.00	135.00		40.00
1,1-DICHLOROPROPENE	563-58-6	10.00	70.00	135.00		40.00
1,2,3-TRICHLOROBENZENE	87-61-6	10.00	60.00	135.00		40.00
1,2,3-TRICHLOROPROPANE	96-18-4	10.00	65.00	130.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	65.00	130.00		40.00
1,2,4-TRIMETHYLBENZENE	95-63-6	10.00	65.00	135.00		40.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	10.00	40.00	135.00		40.00
1,2-DIBROMOETHANE	106-93-4	10.00	70.00	125.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	75.00	120.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	135.00		40.00
1,2-DICHLOROPROPANE	78-87-5	10.00	70.00	120.00		40.00
1,3,5-TRIMETHYLBENZENE	108-67-8	10.00	65.00	135.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	70.00	125.00		40.00
1,3-DICHLOROPROPANE	142-28-9	10.00	75.00	125.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	70.00	125.00		40.00
2,2-DICHLOROPROPANE	594-20-7	10.00	65.00	135.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	160.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	Matrix: SO					
QC Type: MS						
2-CHLOROTOLUENE	95-49-8	10.00	70.00	130.00		40.00
2-HEXANONE	591-78-6	10.00	45.00	145.00		40.00
4-CHLOROTOLUENE	106-43-4	10.00	75.00	125.00		40.00
4-ISOPROPYLTOLUENE	99-87-6	10.00	75.00	135.00		40.00
4-METHYL-2-PENTANONE	108-10-1	10.00	45.00	145.00		40.00
ACETONE	67-64-1	10.00	20.00	160.00		40.00
ACROLEIN	107-02-8	10.00	70.00	130.00		40.00
ACRYLONITRILE	107-13-1	10.00	70.00	130.00		40.00
BENZENE	71-43-2	10.00	75.00	125.00		40.00
BROMOBENZENE	108-86-1	10.00	65.00	120.00		40.00
BROMOCHLOROMETHANE	74-97-5	10.00	70.00	125.00		40.00
BROMODICHLOROMETHANE	75-27-4	10.00	70.00	130.00		40.00
BROMOFORM	75-25-2	10.00	55.00	135.00		40.00
BROMOMETHANE	74-83-9	10.00	30.00	160.00		40.00
CARBON DISULFIDE	75-15-0	10.00	45.00	160.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	135.00		40.00
CHLOROBENZENE	108-90-7	10.00	75.00	125.00		40.00
CHLOROETHANE	75-00-3	10.00	40.00	155.00		40.00
CHLOROFORM	67-66-3	10.00	70.00	125.00		40.00
CHLOROMETHANE	74-87-3	10.00	50.00	130.00		40.00
CIS-1,2-DICHLOROETHENE	156-59-2	10.00	65.00	125.00		40.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.00	70.00	125.00		40.00
DIBROMOCHLOROMETHANE	124-48-1	10.00	65.00	130.00		40.00
DIBROMOMETHANE	74-95-3	10.00	75.00	130.00		40.00
DICHLORODIFLUOROMETHANE	75-71-8	10.00	35.00	135.00		40.00
ETHYLBENZENE	100-41-4	10.00	75.00	125.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	55.00	140.00		40.00
IODOMETHANE	74-88-4	10.00	70.00	126.00		40.00
ISOPROPYLBENZENE	98-82-8	10.00	75.00	130.00		40.00
m,p-xylene	108-38-3	10.00	80.00	125.00		40.00
METHYL ACETATE	79-20-9	10.00	70.00	130.00		40.00
METHYLENE CHLORIDE	75-09-2	10.00	55.00	140.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: MS						
methyl-t-butyl ether	1634-04-4	10.00	75.00	126.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	125.00		40.00
N-BUTYLBENZENE	104-51-8	10.00	65.00	140.00		40.00
N-PROPYLBENZENE	103-65-1	10.00	65.00	135.00		40.00
O-XYLENE	95-47-6	10.00	75.00	125.00		40.00
SEC-BUTYLBENZENE	135-98-8	10.00	65.00	130.00		40.00
STYRENE	100-42-5	10.00	75.00	125.00		40.00
TERT-BUTYL ALCOHOL	75-65-0	10.00	50.00	130.00		40.00
TERT-BUTYLBENZENE	98-06-6	10.00	65.00	130.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	65.00	140.00		40.00
TOLUENE	108-88-3	10.00	70.00	125.00		40.00
TRANS-1,2-DICHLOROETHENE	156-60-5	10.00	65.00	135.00		40.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.00	65.00	125.00		40.00
TRICHLOROETHENE	79-01-6	10.00	75.00	125.00		40.00
TRICHLOROFLUOROMETHANE	75-69-4	10.00	25.00	185.00		40.00
VINYL ACETATE	108-05-4	10.00	65.00	138.00		40.00
VINYL CHLORIDE	75-01-4	10.00	60.00	125.00		40.00
Xylene (Total)	1330-20-7	10.00	83.00	125.00		40.00
QC Type: SURR						
1,2-DICHLOROETHANE-D4	17060-07-0	10.00	65.00	128.00		
BROMOFLUOROBENZENE	30135-88-7	10.00	77.00	111.00		
DIBROMOFLUOROMETHANE	1868-53-7	10.00	65.00	132.00		
TOLUENE-D8	2037-26-5	10.00	85.00	115.00		
Method: 8260B-TCLP	**Matrix: SO**					
QC Type: LCS						
1,1-DICHLOROETHENE	75-35-4	10.00	70.00	130.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	130.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	75.00	125.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	150.00		40.00
BENZENE	71-43-2	10.00	80.00	120.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B-TCLP	**Matrix: SO**					
QC Type: LCS						
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	140.00		40.00
CHLOROBENZENE	108-90-7	10.00	80.00	120.00		40.00
CHLOROFORM	67-66-3	10.00	65.00	135.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	45.00	150.00		40.00
TRICHLOROETHENE	79-01-6	10.00	70.00	125.00		40.00
VINYL CHLORIDE	75-01-4	10.00	50.00	145.00		40.00
QC Type: MS						
1,1-DICHLOROETHENE	75-35-4	10.00	70.00	130.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	130.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	75.00	125.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	150.00		40.00
BENZENE	71-43-2	10.00	80.00	120.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	140.00		40.00
CHLOROBENZENE	108-90-7	10.00	80.00	120.00		40.00
CHLOROFORM	67-66-3	10.00	65.00	135.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	45.00	150.00		40.00
TRICHLOROETHENE	79-01-6	10.00	70.00	125.00		40.00
VINYL CHLORIDE	75-01-4	10.00	50.00	145.00		40.00
QC Type: SURR						
1,2-DICHLOROETHANE-D4	17060-07-0	10.00	70.00	120.00		
BROMOFLUOROBENZENE	30135-88-7	10.00	75.00	120.00		
DIBROMOFLUOROMETHANE	1868-53-7	10.00	85.00	115.00		
TOLUENE-D8	2037-26-5	10.00	85.00	120.00		
Method: 8270C	**Matrix: SO**					
QC Type: LCS						
1,1'-Biphenyl	92-52-4	10.00	50.00	150.00		40.00
1,2,4,5-TETRACHLOROBENZENE	95-94-3	10.00	50.00	150.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	45.00	110.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	Matrix: SO					
QC Type: LCS						
1,2-DICHLOROBENZENE	95-50-1	10.00	45.00	95.00		40.00
1,2-DIPHENYLHYDRAZINE	122-66-7	10.00	50.00	150.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	40.00	100.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	35.00	105.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	45.00	110.00		40.00
2,4-DICHLOROPHENOL	120-83-2	10.00	45.00	110.00		40.00
2,4-DIMETHYLPHENOL	105-67-9	10.00	30.00	105.00		40.00
2,4-DINITROPHENOL	51-28-5	10.00	15.00	130.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	115.00		40.00
2,6-DINITROTOLUENE	606-20-2	10.00	50.00	110.00		40.00
2-CHLORONAPHTHALENE	91-58-7	10.00	45.00	105.00		40.00
2-CHLOROPHENOL	95-57-8	10.00	45.00	105.00		40.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	10.00	30.00	135.00		40.00
2-METHYLNAPHTHALENE	91-57-6	10.00	45.00	105.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	105.00		40.00
2-NITROANILINE	88-74-4	10.00	45.00	120.00		40.00
2-NITROPHENOL	88-75-5	10.00	40.00	110.00		40.00
3,3'-DICHLOROBENZIDINE	91-94-1	10.00	10.00	130.00		40.00
3-NITROANILINE	99-09-2	10.00	25.00	110.00		40.00
4-BROMOPHENYL PHENYL ETHER	101-55-3	10.00	45.00	115.00		40.00
4-CHLORO-3-METHYLPHENOL	59-50-7	10.00	45.00	115.00		40.00
4-CHLOROANILINE	106-47-8	10.00	10.00	95.00		40.00
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10.00	45.00	110.00		40.00
4-METHYLPHENOL	106-44-5	10.00	50.00	150.00		40.00
4-NITROANILINE	100-01-6	10.00	35.00	115.00		40.00
4-NITROPHENOL	100-02-7	10.00	15.00	140.00		40.00
ACENAPHTHENE	83-32-9	10.00	45.00	110.00		40.00
ACENAPHTHYLENE	208-96-8	10.00	45.00	105.00		40.00
ACETOPHENONE	98-86-2	10.00	50.00	150.00		40.00
ANTHRACENE	120-12-7	10.00	55.00	105.00		40.00
ATRAZINE	1912-24-9	10.00	50.00	150.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	Matrix: SO					
QC Type: LCS						
Azobenzene	103-33-3	10.00	50.00	150.00		40.00
BENZALDEHYDE	100-52-7	10.00	10.00	118.00		40.00
BENZIDINE	92-87-5	10.00	10.00	150.00		40.00
BENZO(A)ANTHRACENE	56-55-3	10.00	50.00	110.00		40.00
BENZO(A)PYRENE	50-32-8	10.00	50.00	110.00		40.00
BENZO(B)FLUORANTHENE	205-99-2	10.00	45.00	115.00		40.00
BENZO(G,H,I)PERYLENE	191-24-2	10.00	40.00	125.00		40.00
BENZO(K)FLUORANTHENE	207-08-9	10.00	45.00	125.00		40.00
BIS(2-CHLOROETHOXY)METHANE	111-91-1	10.00	45.00	110.00		40.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	10.00	40.00	105.00		40.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	10.00	20.00	115.00		40.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	10.00	45.00	125.00		40.00
BUTYLBENZYL PHTHALATE	85-68-7	10.00	50.00	125.00		40.00
CAPROLACTAM	105-60-2	10.00	50.00	150.00		40.00
CARBAZOLE	86-74-8	10.00	45.00	115.00		40.00
CHRYSENE	218-01-9	10.00	55.00	110.00		40.00
DIBENZ(A,H)ANTHRACENE	53-70-3	10.00	40.00	125.00		40.00
DIBENZOFURAN	132-64-9	10.00	50.00	105.00		40.00
DIETHYL PHTHALATE	84-66-2	10.00	50.00	115.00		40.00
DIMETHYL PHTHALATE	131-11-3	10.00	50.00	110.00		40.00
DI-N-BUTYL PHTHALATE	84-74-2	10.00	55.00	110.00		40.00
DI-N-OCTYL PHTHALATE	117-84-0	10.00	40.00	130.00		40.00
FLUORANTHENE	206-44-0	10.00	55.00	115.00		40.00
FLUORENE	86-73-7	10.00	50.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	45.00	120.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	40.00	115.00		40.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	5.00	8.00	148.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	35.00	110.00		40.00
INDENO(1,2,3-CD)PYRENE	193-39-5	10.00	40.00	120.00		40.00
ISOPHORONE	78-59-1	10.00	45.00	110.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	105.00		40.00
NITROBENZENE	98-95-3	10.00	40.00	115.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	Matrix: SO					
QC Type: LCS						
N-NITROSODIMETHYLAMINE	62-75-9	10.00	50.00	150.00		40.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	10.00	40.00	115.00		40.00
N-NITROSODIPHENYLAMINE	86-30-6	10.00	50.00	115.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	25.00	120.00		40.00
PHENANTHRENE	85-01-8	10.00	50.00	110.00		40.00
PHENOL	108-95-2	10.00	40.00	100.00		40.00
PYRENE	129-00-0	10.00	45.00	125.00		40.00
QC Type: MS						
1,1'-Biphenyl	92-52-4	10.00	50.00	150.00		40.00
1,2,4,5-TETRACHLOROBENZENE	95-94-3	10.00	50.00	150.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	45.00	110.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	45.00	95.00		40.00
1,2-DIPHENYLHYDRAZINE	122-66-7	10.00	50.00	150.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	40.00	100.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	35.00	105.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	45.00	110.00		40.00
2,4-DICHLOROPHENOL	120-83-2	10.00	45.00	110.00		40.00
2,4-DIMETHYLPHENOL	105-67-9	10.00	30.00	105.00		40.00
2,4-DINITROPHENOL	51-28-5	10.00	15.00	130.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	115.00		40.00
2,6-DINITROTOLUENE	606-20-2	10.00	50.00	110.00		40.00
2-CHLORONAPHTHALENE	91-58-7	10.00	45.00	105.00		40.00
2-CHLOROPHENOL	95-57-8	10.00	45.00	105.00		40.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	10.00	30.00	135.00		40.00
2-METHYLNAPHTHALENE	91-57-6	10.00	45.00	105.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	105.00		40.00
2-NITROANILINE	88-74-4	10.00	45.00	120.00		40.00
2-NITROPHENOL	88-75-5	10.00	40.00	110.00		40.00
3,3'-DICHLOROBENZIDINE	91-94-1	10.00	10.00	130.00		40.00
3-NITROANILINE	99-09-2	10.00	25.00	110.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C Matrix: SO						
QC Type: MS						
4-BROMOPHENYL PHENYL ETHER	101-55-3	10.00	45.00	115.00		40.00
4-CHLORO-3-METHYLPHENOL	59-50-7	10.00	45.00	115.00		40.00
4-CHLOROANILINE	106-47-8	10.00	10.00	95.00		40.00
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10.00	45.00	110.00		40.00
4-METHYLPHENOL	106-44-5	10.00	50.00	150.00		40.00
4-NITROANILINE	100-01-6	10.00	35.00	115.00		40.00
4-NITROPHENOL	100-02-7	10.00	15.00	140.00		40.00
ACENAPHTHENE	83-32-9	10.00	45.00	110.00		40.00
ACENAPHTHYLENE	208-96-8	10.00	45.00	105.00		40.00
ACETOPHENONE	98-86-2	10.00	50.00	150.00		40.00
ANTHRACENE	120-12-7	10.00	55.00	105.00		40.00
ATRAZINE	1912-24-9	10.00	50.00	150.00		40.00
Azobenzene	103-33-3	10.00	50.00	150.00		40.00
BENZALDEHYDE	100-52-7	10.00	10.00	118.00		40.00
BENZIDINE	92-87-5	10.00	10.00	150.00		40.00
BENZO(A)ANTHRACENE	56-55-3	10.00	50.00	110.00		40.00
BENZO(A)PYRENE	50-32-8	10.00	50.00	110.00		40.00
BENZO(B)FLUORANTHENE	205-99-2	10.00	45.00	115.00		40.00
BENZO(G,H,I)PERYLENE	191-24-2	10.00	40.00	125.00		40.00
BENZO(K)FLUORANTHENE	207-08-9	10.00	45.00	125.00		40.00
BIS(2-CHLOROETHOXY)METHANE	111-91-1	10.00	45.00	110.00		40.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	10.00	40.00	105.00		40.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	10.00	20.00	115.00		40.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	10.00	45.00	125.00		40.00
BUTYLBENZYL PHTHALATE	85-68-7	10.00	50.00	125.00		40.00
CAPROLACTAM	105-60-2	10.00	50.00	150.00		40.00
CARBAZOLE	86-74-8	10.00	45.00	115.00		40.00
CHRYSENE	218-01-9	10.00	55.00	110.00		40.00
DIBENZ(A,H)ANTHRACENE	53-70-3	10.00	40.00	125.00		40.00
DIBENZOFURAN	132-64-9	10.00	50.00	105.00		40.00
DIETHYL PHTHALATE	84-66-2	10.00	50.00	115.00		40.00
DIMETHYL PHTHALATE	131-11-3	10.00	50.00	110.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: MS						
DI-N-BUTYL PHTHALATE	84-74-2	10.00	55.00	110.00		40.00
DI-N-OCTYL PHTHALATE	117-84-0	10.00	40.00	130.00		40.00
FLUORANTHENE	206-44-0	10.00	55.00	115.00		40.00
FLUORENE	86-73-7	10.00	50.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	45.00	120.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	40.00	115.00		40.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	5.00	8.00	148.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	35.00	110.00		40.00
INDENO(1,2,3-CD)PYRENE	193-39-5	10.00	40.00	120.00		40.00
ISOPHORONE	78-59-1	10.00	45.00	110.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	105.00		40.00
NITROBENZENE	98-95-3	10.00	40.00	115.00		40.00
N-NITROSODIMETHYLAMINE	62-75-9	10.00	50.00	150.00		40.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	10.00	40.00	115.00		40.00
N-NITROSODIPHENYLAMINE	86-30-6	10.00	50.00	115.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	25.00	120.00		40.00
PHENANTHRENE	85-01-8	10.00	50.00	110.00		40.00
PHENOL	108-95-2	10.00	40.00	100.00		40.00
PYRENE	129-00-0	10.00	45.00	125.00		40.00
QC Type: SURR						
2,4,6-TRIBROMOPHENOL	118-79-6	10.00	35.00	125.00		
2-FLUOROBIPHENYL	321-60-8	10.00	45.00	105.00		
2-FLUOROPHENOL	367-12-4	10.00	35.00	105.00		
NITROBENZENE-D5	20810-28-0	10.00	35.00	100.00		
PHENOL-D5	4165-62-2	10.00	40.00	100.00		
TERPHENYL-D14	98904-43-9	10.00	30.00	125.00		
Method: 8270C-TCLP	**Matrix: SO**					
QC Type: LCS						
1,4-DICHLOROBENZENE	106-46-7	10.00	30.00	100.00		
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C-TCLP	Matrix: SO					
QC Type: LCS						
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	50.00	115.00		
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	120.00		
2-METHYLPHENOL	95-48-7	10.00	40.00	110.00		
3&4-Methylphenol	106-44-5	10.00	30.00	110.00		
HEXACHLOROBENZENE	118-74-1	10.00	50.00	110.00		
HEXACHLOROBUTADIENE	87-68-3	10.00	25.00	105.00		
HEXACHLOROETHANE	67-72-1	10.00	30.00	95.00		
NITROBENZENE	98-95-3	10.00	45.00	110.00		
PENTACHLOROPHENOL	87-86-5	10.00	40.00	115.00		
PYRIDINE	110-86-1	10.00	10.00	106.00		
QC Type: MS						
1,4-DICHLOROBENZENE	106-46-7	10.00	30.00	100.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	50.00	115.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	120.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	110.00		40.00
3&4-Methylphenol	106-44-5	10.00	30.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	50.00	110.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	25.00	105.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	30.00	95.00		40.00
NITROBENZENE	98-95-3	10.00	45.00	110.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	40.00	115.00		40.00
PYRIDINE	110-86-1	10.00	10.00	106.00		40.00
QC Type: SURR						
2,4,6-TRIBROMOPHENOL	118-79-6	10.00	40.00	125.00		
2-FLUOROBIPHENYL	321-60-8	10.00	50.00	110.00		
2-FLUOROPHENOL	367-12-4	10.00	20.00	110.00		
NITROBENZENE-D5	20810-28-0	10.00	40.00	110.00		
PHENOL-D5	4165-62-2	10.00	10.00	115.00		
TERPHENYL-D14	98904-43-9	10.00	50.00	135.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 9012	**Matrix: SO**					
QC Type: LCS						
CYANIDE	57-12-5	10.00	80.00	120.00		
QC Type: MS						
CYANIDE	57-12-5	10.00	75.00	125.00		
Method: DOE 4.5.2.3	**Matrix: SO**					
QC Type: LCS						
Ac-228	14331-83-0	104.00	104.00	130.00		3.92
Bi-212	14913-49-6	57.00	57.00	90.00		3.92
Bi-214	14733-03-0	96.00	96.00	120.00		3.92
K-40	13966-00-2	102.00	102.00	118.00		3.92
Pb-212	15092-94-1	107.00	107.00	128.00		3.92
Pb-214	15067-28-4	99.00	99.00	127.00		3.92
Ra-226	13982-63-3	65.00	65.00	106.00		3.92
Ra-228	15262-20-1	104.00	104.00	130.00		3.92
Th-234	15065-10-8	13.00	13.00	370.00		3.92
Method: EPA 1010	**Matrix: SO**					
QC Type: LCS						
IGNITABILITY	10-36-6	50.00	80.00	120.00		25.00
Method: SM 4500-NH3 D	**Matrix: AQ**					
QC Type: LCS						
AMMONIA AS N	7664-41-7	10.00	80.00	120.00		20.00
QC Type: MS						
AMMONIA AS N	7664-41-7	10.00	80.00	120.00		20.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: SM 5220D	**Matrix: AQ**					
QC Type: LCS						
CHEMICAL OXYGEN DEMAND	COD	10.00	80.00	120.00		20.00
QC Type: MS						
CHEMICAL OXYGEN DEMAND	COD	10.00	80.00	120.00		20.00
Method: SW846_7.3.1	**Matrix: SO**					
QC Type: LCS						
Reactive Cyanide	57-12-5	0.00	0.00	12.40		20.00
QC Type: MS						
Reactive Cyanide	57-12-5	0.00	0.00	12.40		20.00
Method: SW846_7.3.2	**Matrix: SO**					
QC Type: LCS						
Reactive Sulfide	18496-25-8	10.00	22.60	114.00		20.00
QC Type: MS						
Reactive Sulfide	18496-25-8	10.00	22.60	114.00		20.00

APPENDIX 5

STANDARD SAMPLE TRACKING AND DOCUMENTATION FORMS, REVIEW FORMS AND CHECKLISTS

SAMPLE IDENTIFICATION LABEL

I-CHEM

CLIENT/SOURCE	☐ GRAB ☐ COMPOSITE OTHER:
SITE NAME	DATE
SAMPLE #	TIME
ANALYSIS	PRESERVATIVE
	COLL. BY

CHAIN-OF-CUSTODY FORM

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME					PARAMETERS									INDUSTRIAL HYGIENE SAMPLE	Y / N
SAMPLERS: *(Signature)*					(Printed)											
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS									REMARKS	

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
(Printed)		(Printed)	(Printed)		(Printed)

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
(Printed)		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Preparatory Phase Checklist

Contract:	Date Preparatory Held:
Spec. Section & Paragraph:	Definable Feature of Work:
Drawing Sheet Numbers:	Major Definable Feature:

A. Personnel Present

Name	Position	Company

B. Has each spec. paragraph, drawing, and shop drawing detail been studied? Yes ___ No ___

C. Transmittals Involved

Number and Item	Code	Contractor/Government Approval

Have all items involved been approved? Yes _____ No_____

D. Are all materials on-hand? Yes ____ No_____

Are the materials on the job-site to be incorporated the same as those approved?
Yes _____ No _____

Have all materials been checked for contract compliance against approved shop drawings? Yes ____ No _____

Equipment to be used in executing the work:

Items not on-hand or not in compliance with transmittals:

E. Tests required in accordance with contract requirements:

Test	Paragraph

F. Accident Prevention Planning - Hazard Control Measures:

Activity Hazard Analysis

Activity	Hazard(s)	Controls

Operational Equipment Checklist

Attached For:

On File For:

G. Have procedures for accomplishing work been reviewed with appropriate people?

Yes ___ No

Scope of Work/Method of Construction:

Safety Issues:

Spill Prevention Issues:

H. Has all preliminary work been accomplished in accord with contract requirements and is this segment of work ready to start? Yes ___ No

Explain any problems:

I. Remarks:

USACE Comments:

Sevenson Comments:

CQC Systems Manager	Project Engineer

Initial/Follow-Up Phase Inspection Checklist

Inspection Type: ☐ Initial Phase ☐ Follow-Up Phase

Date: _____ Specifications Paragraph: _____

Description and location of work inspected: _____

_____

Reference contract drawings: _____

A. Personnel Present

Name	Position	Company

B. Materials being used are in strict compliance with the Contract Plans and Specifications?
YES _____ NO _____
If not, explain: _____

_____

C. Procedures and/or work methods witnessed are in strict compliance with the requirements of the Contract Specifications? YES _____ NO _____
If not, explain: _____

_____

D. Workmanship is acceptable? YES _____ NO _____
State areas where improvement is needed: _____

_____

E. Safety violations and corrective actions taken: _____

_____

F. Remarks: _____

_____

_____

_____ _____

Quality Control Representative Project Engineer

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: _____

Job Identification and Site Numbers: _____

_____

Weather: _____

_____

Subcontractors Present Onsite: _____

_____

Health and Safety Measures Necessary for Planned Activities: _____

_____

Health and Safety Violations and Corrective Actions: _____

_____

_____

Planned Daily Activities: _____

_____

_____

Description of Chemical Data Acquisition Work Performed: _____

_____

_____

Sample Shipments and Problems Regarding Sampling and Sample Shipments: _____

_____

Chemical Parameter Measurement Problems: _____

_____

_____

Contingency Sampling: _____

_____

_____

Non-conformance Problems: _____

_____

_____

Corrective Actions (including approvals): _____

_____

_____

Initials of Personnel Performing Corrective Actions: _____

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): _____

_____

_____

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

_____ _____

Signature Date

SITE QC INSPECTION REPORT

Project Name _____

Sevenson Job # _____

Project Location _____

Client/Generator _____

Contract # _____

Task Order # _____

Inspection Date _____

Inspected By _____

Inspection Time _____

Sevenson Project Manager _____

Site Telephone # _____

Site Facsimile # _____

Site Email Address _____

Client/Generator Project Manager _____

Contact Telephone # _____

Contact Facsimile # _____

Site Plans/Activities

Construction Management Plan/Work Plan

Original Approval Date _____

Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Current Plan Copy Available Onsite
☐	☐	Spill Response equipment/materials available?
☐	☐	Soil erosion/sediment controls in-place?
☐	☐	Work zones (EZ, CRZ, SZ) clearly delineated?
☐	☐	All equipment inspections being documents (in and out)?

COMMENTS: _____

_____

_____

_____

_____

Health and Safety

Original Plan Approval Date _____
Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Current Plan Copy Available Onsite
☐	☐	Activity Hazard Analysis Complete and Updated
☐	☐	Daily Safety Meetings Conducted and Documented
☐	☐	Emergency Response Information Posted
☐	☐	Medical and Training Documentation Current
☐	☐	Daily Safety Logs Completed
☐	☐	Chemical Inventory Updated
☐	☐	Inspections Completed and Documented
☐	☐	Map to hospital prominently displayed?
☐	☐	Is work being conducted safely?

COMMENTS: _____

_____

_____

Sampling and Analysis

Original Plan Approval Date _____
Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Is a current plan copy available onsite?
☐	☐	Has a review of the Plan and all relevant SOPs with all site sampling been conducted?
☐	☐	Are field logbooks and other site documentation maintained properly and in a secure area?
☐	☐	Are Preparatory Inspections being conducted prior to each sampling event?
☐	☐	Are Initial and Follow-up Inspections being conducted for each sampling event?
☐	☐	Is the site Sampling Manager performing periodic field audits of all sampling activities?
☐	☐	Is field documentation being reviewed by the site Sampling Manager prior to the completion of each days' sampling events?
☐	☐	Is the Sampling Manager performing field audits of sample labeling, chain-of-custody, packing and shipping activities?
☐	☐	Are Daily Chemical Quality Control Reports (DCQCR) being completed each day and properly?
☐	☐	Are DCQCR, instrument maintenance and calibration, nonconformance/corrective action reports and sampling logs current?

COMMENTS: _____

_____

_____

Project Work Tasks	Sevenson Checklist #
(Check all that apply and attach completed QC Report)	
☐ Monitoring Well Installation, Development, and/or Abandonment	SES 001
☐ Groundwater Monitoring Well Sampling	SES 002
☐ Surface Water Sampling	SES 003
☐ Subsurface Soil Sampling	SES 004
☐ Drum/Tank Sampling	SES 005
☐ Mobile Laboratory	SES 006
☐ Packing, Storing, and Shipment of Samples	SES 007
☐ Field Documentation	SES 008
☐ Decontamination	SES 009
☐ Sample Cooler Shipment	SES 010
☐ Onsite Waste Storage	SES 011
☐ Offsite waste Transport/Disposal	SES 012

COMMENTS: _____

_____

_____

_____

Sevenson Project Manager _____

Name Signature Date

QC Reviewer _____

Name Signature Date

CQC Systems Manager _____

Name Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?				
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?				
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?				
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?				
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?				
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?				
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?				
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?				
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?				
Was a shipping label attached to the cooler?				
Were COCs and shipping tracking labels faxed to lab?				

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?			
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?			
▫ Field Sampling Forms			
▫ Chain of Custody Forms			
▫ Field Log Books			
▫ Field Change Request Forms			
▫ Additional Forms (list below)			
Was field documentation forwarded to Sevenson office for peer/QC review?			
Were deficiencies reported to the Field Sampling Manager?			

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Decontamination
Sevenson Checklist #009

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Was all sampling equipment decontaminated properly prior to use and between sample intervals?				
Was each decontamination event recorded in the logbook?				
Was investigation derived waste (IDW) (e.g., decontamination water, personal protective equipment (PPE), etc.) handled properly?				
Were the location, type, number and source of containers of IDW recorded in the logbook?				
Was Sevenson Technical Services notified if IDW requires offsite disposal?				

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: _____

Inspection Date: _____

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☐	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☐	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☐	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☐	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☐	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☐	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☐	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☐	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☐	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☐	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☐	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☐	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☐	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☐	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☐	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☐	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☐	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☐	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☐	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

_____

_____

_____

Sevenson Project Manager _____

Name Signature Date

QC Reviewer _____

Name Signature Date

CQC Systems Manager _____

Name Signature Date

Field Change Request Form

PROJECT MANAGER:_____
PROJECT:_____
JOB NUMBER:_____
CONTRACT NUMBER:_____
DATE:_____
FIELD CHANGE REQUEST NUMBER:_____

Weather

	Bright Sun	Clear	Overcast	Rain	Snow
Temp	To 32	32-50	50-70	70-85	85 up
Wind	Calm	Moderate	High		
Humidity	Dry	Moderate	Humid		

SUB-CONTRACTORS ON SITE:

EQUIPMENT ON SITE:

SAMPLING PERFORMED:

NON-CONFORMANCE/PROBLEM ITEM(S):

PROJECT QA/QC OFFICER NOTIFIED:	TIME	DATE	INITIALS
PROJECT MANAGER NOTIFIED:	TIME	DATE	INITIALS
CONTRACTING OFFICER NOTIFIED:	TIME	DATE	INITIALS
PROJECT TECHNICAL DIRECTOR NOTIFIED:	TIME	DATE	INITIALS

WORK STOPPED? _____ YES _____ NO

IF NOT, EXPLAIN

Sheet _____ of _____

PROJECT _____ REPORT NO. _____

JOB NO. _____ DATE _____

ACTION TO BE TAKEN:

HEALTH AND SAFETY LEVEL CHANGES: _____No _____ Yes (explain)

HSO NAME/DATE:

PROBLEM RESOLUTION:

SPECIAL NOTES:

FOLLOW-UP TO BE FILED? _____ No _____ Yes (explain/attach)

FIELD CHANGE APPROVED: _____ No _____ Yes Initials: _____

Sheet _____ of _____

BY: _____ TITLE:

NON-CONFORMANCE/QUALITY CONTROL REPORT

Date: _____

Organization Name: _____

Initiator's Name and Title: _____

Problem Description:

_____
_____
_____
_____
_____
_____
_____

Reported To: _____

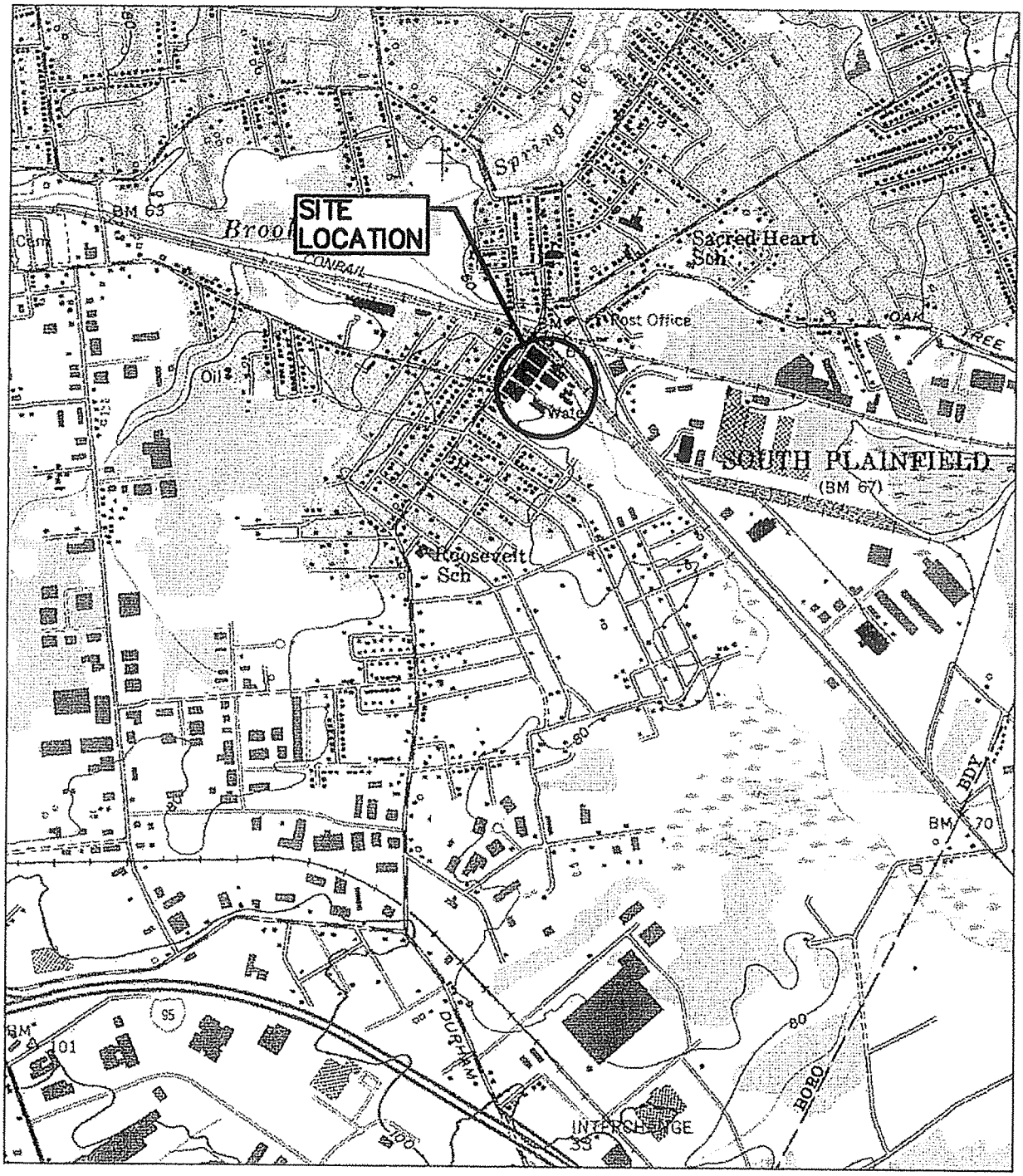
Corrective Action:

_____
_____
_____
_____
_____
_____
_____

Reviewed and Implemented by: _____

APPENDIX 1

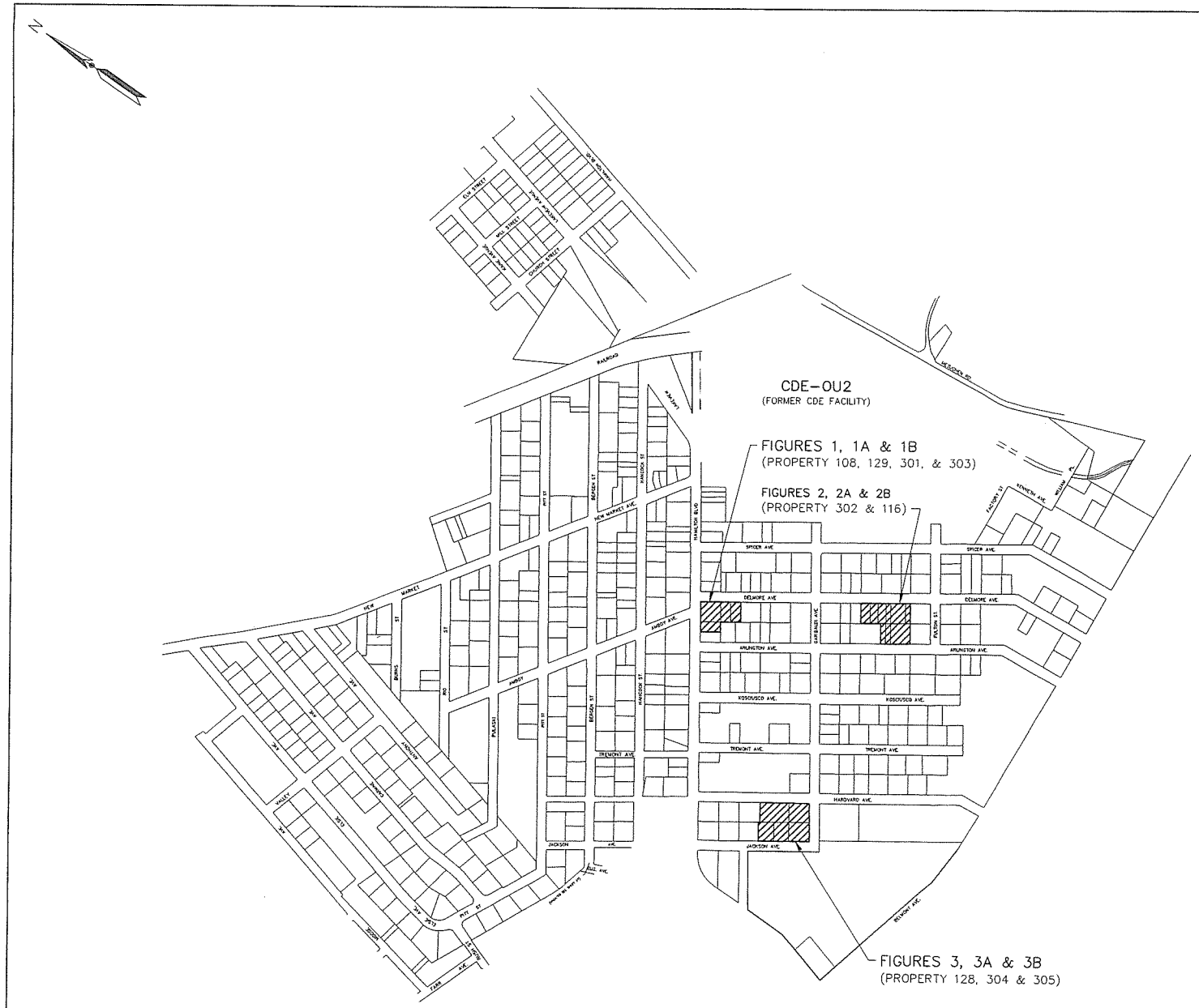
FIGURES



SOURCE: U.S.G.S. TOPOGRAPHIC MAP,
7.5 MINUTE SERIES, PLAINFIELD, NEW JERSEY
QUADRANGLE, 1955, PHOTOREVISED 1981

MALCOLM PIRNIE	U.S. ARMY CORPS OF ENGINEERS CORNELL–DUBILIER SUPERFUND SITE OU–2 SOILS SOUTH PLAINFIELD, NEW JERSEY CONTRACT NO. W912DQ–06–D–0006 TO 0001	SITE LOCATION MAP SCALE AS NOTED	MALCOLM PIRNIE, INC. JULY 2007 FIGURE 1–1

User: ...OND Spec: PIRNIE STANDARD File: I:\ACAD\PROJ\4553033\CLIENT\BUFFALO\04-03-07\SITE-LOC-4553023-B.DWG Scale: 1:1 Date: 07/17/2007 Time: 15:36 Layout: FIGURE 1



KEY MAP
NOT TO SCALE

ARCADIS

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
KEY MAP

JOB NO:
CONTRACT NO.
SHEET NAME: K-1
SHEET 3 OF 15
FILE NAME:
DRAWN BY: K. IAMICELI
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
DATE: JANUARY 2012

TABLE 1a EXCAVATION COORDINATE TABLE		
EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	634411	515616
A2	634384	515597
A3	634364	515624
A4	634392	515643
B1	634384	515597
B2	634369	515586
B3	634357	515603
B4	634351	515614
B5	634364	515624
C1	634366	515584
C2	634328	515557
C3	634276	515630
C4	634272	515627
C5	634268	515632
C6	634265	515630
C7	634261	515635
C8	634269	515640
C9	634281	515648
C10	634300	515623
C11	634309	515629
C12	634330	515600
C13	634342	515609
C14	634354	515599
C7	634261	515635
C8	634281	515648
C9	634300	515623
C10	634309	515629
C11	634330	515600
C12	634342	515609
C13	634354	515599
D1	634417	515644
D2	634413	515619
D3	634373	515676
D4	634377	515678
E1	634365	515681
E2	634344	515666
E3	634340	515666
E4	634334	515672
E5	634326	515681
E6	634352	515699
F1	634353	515653
F2	634347	515649
F3	634343	515655
F4	634349	515659
G1	634352	515699
G2	634306	515666
G3	634302	515675
G4	634320	515687
G5	634322	515685
G6	634329	515690
G7	634329	515711
G8	634339	515718
H1	634306	515666
H2	634267	515639
H3	634232	515697
H4	634247	515708
H5	634267	515708
H6	634297	515727
H7	634305	515715
H8	634287	515702
H9	634290	515697
H10	634284	515693
H11	634280	515699
H12	634266	515689
H13	634263	515693
H14	634244	515679
H15	634257	515662
H16	634274	515675
H17	634287	515660
H18	634303	515673
H19	634238	515680
H20	634241	515683
I1	634284	515651
I2	634279	515647
I3	634274	515655
I4	634279	515659

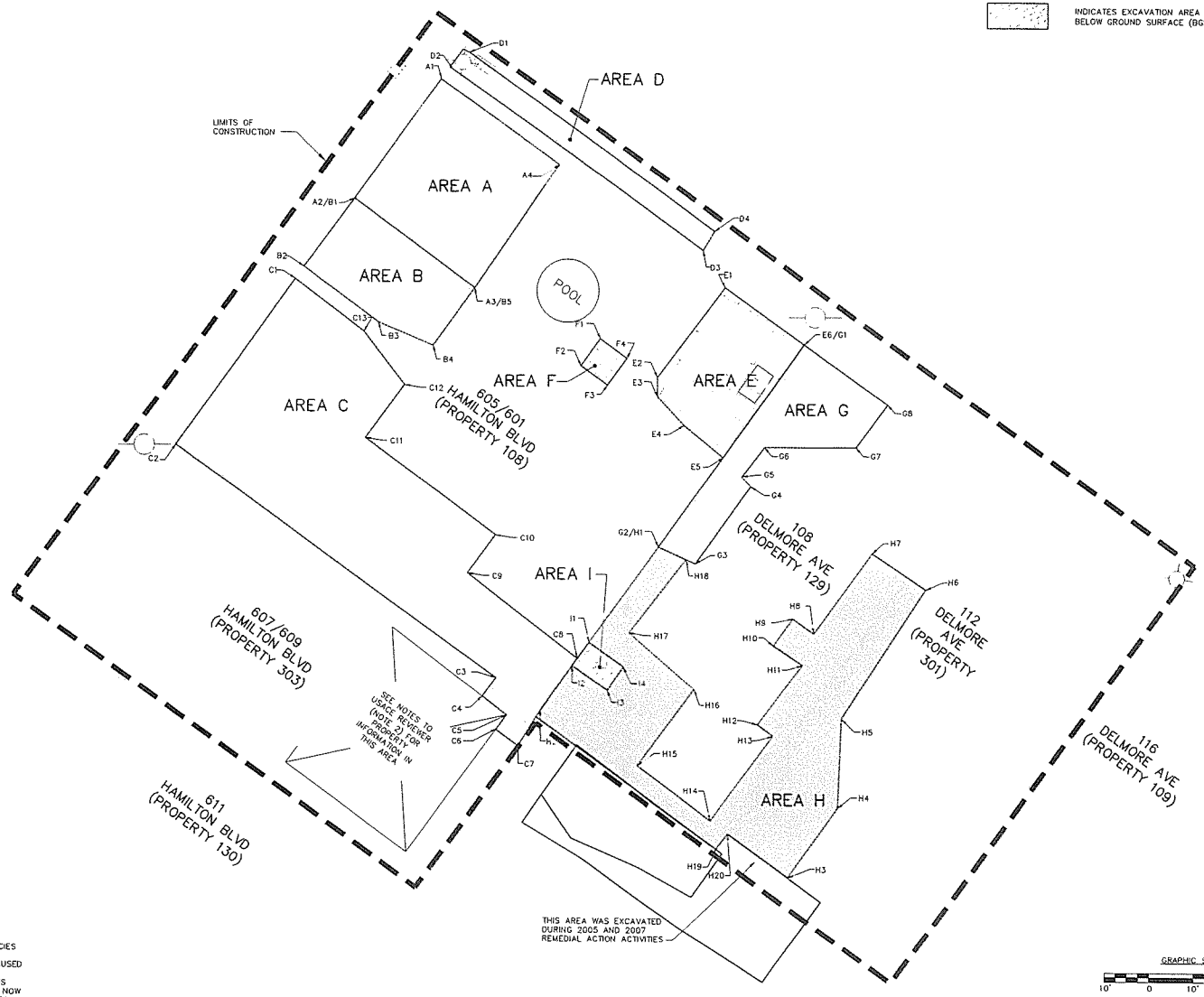
TABLE 1b – VOLUME OF EXCAVATION		
AREA	SQ. FT.	VOLUME
A	1125	42 CY
B	627	12 CY
C	3054	57 CY
D	255	5 CY
E	681	39 CY
F	56	4 CY
G	719	14 CY
H	2142	160 CY
I	62	6 CY
TOTAL EXCAVATION VOLUME		339 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. CONTRACTOR SHALL EXCAVATE UP TO THE PREVIOUSLY EXCAVATED AREA ON 109 ARLINGTON. IT IS ESTIMATED THAT THIS WILL BE 2 TO 3 FEET ONTO THE PROPERTY. CONTRACTOR SHALL CONFIRM VISUALLY IN THE FIELD.

LEGEND

- INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–30" BELOW GROUND SURFACE (BGS)



GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1"= 10'-0"

NOTES TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (I.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED.
2. PROPERTY FEATURES AT THIS LOCATION ARE BEING CONFIRMED BY SURVEYOR. EXACT LOCATION OF PAVEMENT TO BE CONFIRMED.

ARCADIS

REVISIONS.

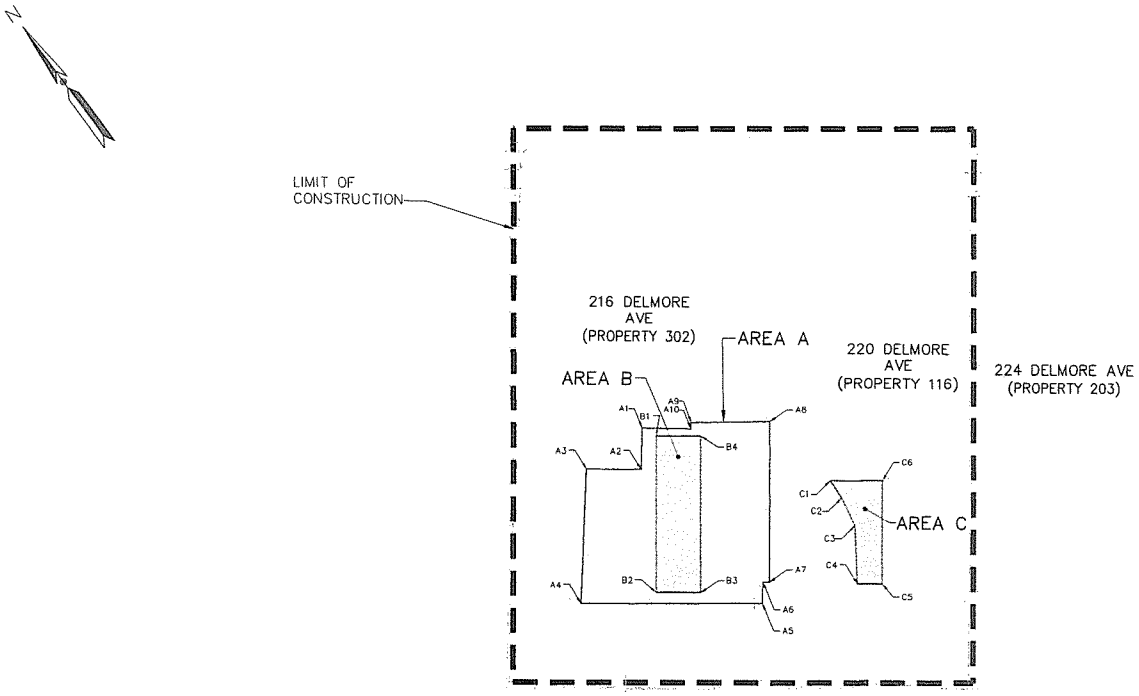
No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 108, 129, 301 & 303
EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE 1A
SHEET 7 OF 15
FILE NAME:
DRAWN BY: K. IAMICELI
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
DATE: JANUARY 2012



LEGEND

INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-24" BELOW GROUND SURFACE (BGS)

TABLE 2a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633888	516261
A2	633881	516256
A3	633888	516247
A4	633867	516231
A5	633845	516261
A6	633849	516263
A7	633848	516265
A8	633874	516283
A9	633883	516270
A10	633882	516269
B1	633885	516263
B2	633859	516244
B3	633854	516252
B4	633880	516270
C1	633857	516287
C2	633853	516286
C3	633847	516285
C4	633837	516279
C5	633834	516283
C6	633851	516295

TABLE 2b – VOLUME OF EXCAVATION

AREA	SQ. FT.	VOLUME
A	972	19 CY
B	291	22 CY
C	136	11 CY
TOTAL EXCAVATION VOLUME		52 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 2a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED.

GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1"= 10'-0"

ARCADIS

REVISIONS

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME

OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE

PROPERTY 116 & 302
EXCAVATION PLAN

JOB NO:

CONTRACT NO:

SHEET NAME: FIGURE 2A

DRAWN BY: K. IAMICELI

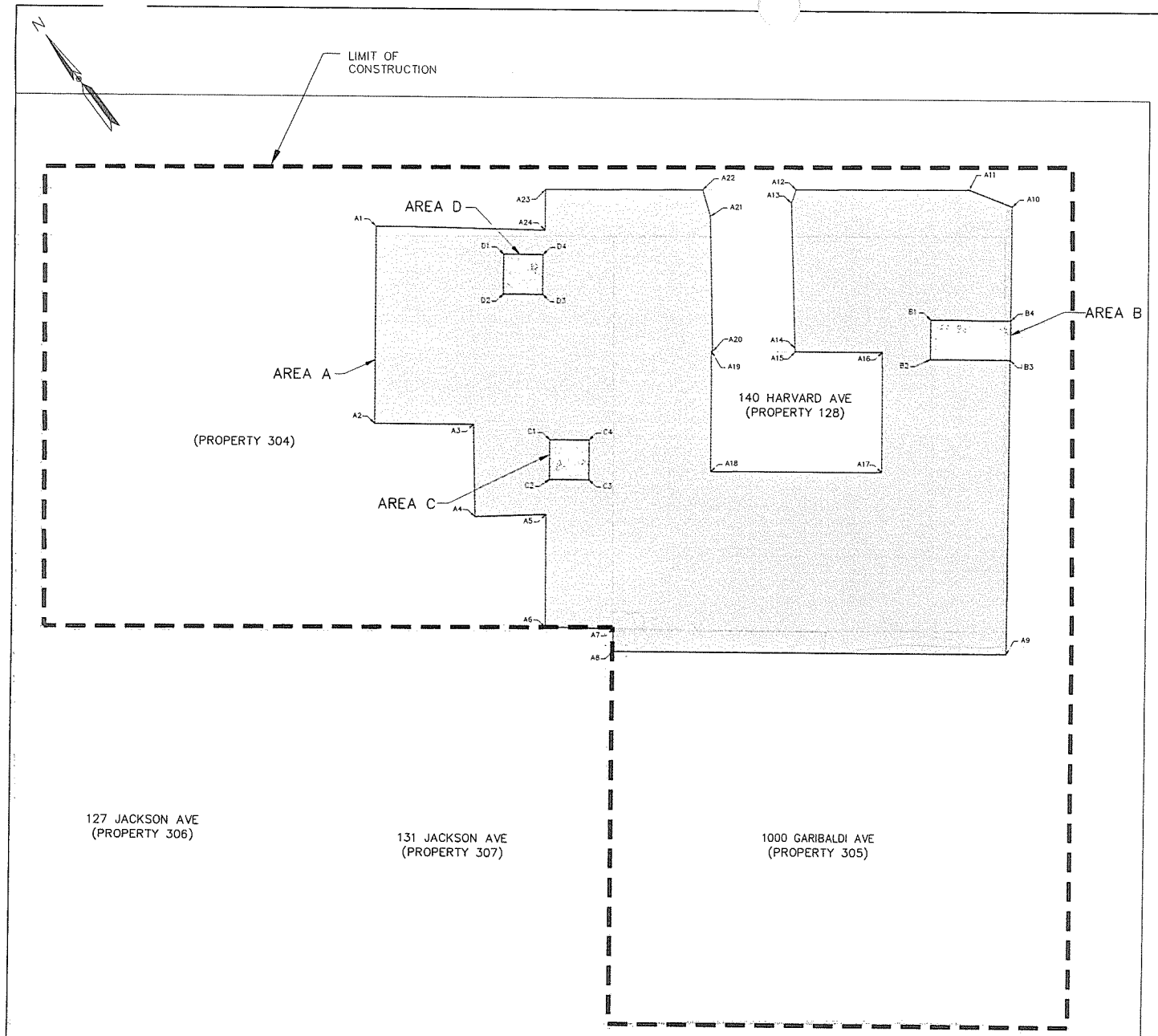
DESIGNED BY: A. MASON

CHECKED BY: B. GIRARD

SHEET 10 OF 15

FILE NAME:

DATE: JANUARY 2012



LEGEND

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.

TABLE 3a - EXCAVATION POINTS

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633371	515352
A2	633331	515323
A3	633316	515343
A4	633297	515330
A5	633286	515345
A6	633263	515328
A7	633253	515342
A8	633248	515339
A9	633189	515420
A10	633280	515487
A11	633290	515481
A12	633316	515445
A13	633314	515442
A14	633284	515421
A15	633283	515421
A16	633270	515439
A17	633245	515421
A18	633271	515386
A19	633296	515404
A20	633295	515404
A21	633323	515423
A22	633330	515426
A23	633353	515392
A24	633345	515387
B1	633289	515454
B2	633261	515448
B3	633249	515464
B4	633257	515470
C1	633301	515357
C2	633293	515351
C3	633287	515359
C4	633295	515365
D1	633346	515375
D2	633336	515369
D3	633332	515377
D4	633340	515383

TABLE 3b – VOLUME OF EXCAVATION

AREA	SQ. FT	VOLUME
A	27,768	2057 CY
B	204	30 CY
C	100	9 CY
D	100	9 CY
TOTAL EXCAVATION VOLUME		2105 CY

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED.

GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1"= 10'-0"

ARCADIS

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 128, 304 & 305
EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE 3A
DRAWN BY: K. IAMICELI
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
SHEET 13 OF 15
FILE NAME:
DATE: JANUARY 2012

APPENDIX 2

DATA NEEDS TABLE

Appendix 2

Data Needs Table

Operable Unit 1 – Soil Remediation
Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Data Need	Data User	Parameter	Method	Quantitation Limits	Rationale for Analysis	Data Use
Offsite backfill and topsoil	Remedial action team	VOCs	SW846 8260B	See Worksheet #15 for project QLs	Parameters required by NJAC 7:26D.	Will be used by the remedial action team to verify that offsite backfill and topsoil meet the requirements of the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) prior to bringing the materials to the site
		SVOCs	SW846 8270D			
		Pesticides	SW846 8081B			
		PCBs	SW846 8082A			
		Metals and Mercury	SW846 6010C/7471B			
		Cyanide	SW846 9012B			
		Radiological Parameters	HASL-300 or equivalent gamma spectroscopy method			
Solid waste characterization	Remedial action team, offsite disposal facility	Ignitability	SW846 1010	See Worksheet #15 for project QLs	Parameters required by offsite disposal facility for waste characterization. Laboratory analyses will be performed to meet the requirements of the Pennsylvania Department of Environmental Protection, Bureau of Waste Management, Form U. Additional analyses may be performed at the direction of the offsite disposal facility. Sevenson's Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.	Will be used to characterize the waste for disposal at the appropriate offsite disposal facility
		pH	SW846 9045D SW846 9040C			
		Reactive Cyanide	SW846 Section 7.4.3.2			
		Reactive Sulfide	SW846 Section 7.4.4.3			
		TCLP Metals and Mercury	SW846 6010C/7470A			
		TCLP SVOCs	SW846 8270D			
		TCLP Pesticides	SW846 8081B			
		TCLP Herbicides	SW846 8151A			
		PCBs	SW846 8082A			
		TCLP VOCs	SW-846 8260B			

Data Need	Data User	Parameter	Method	Quantitation Limits	Rationale for Analysis	Data Use
		Oil and Grease	EPA 1664A			
		Ammonia-Nitrogen	SM 4500NH3-D			
		Chemical Oxygen Demand (COD)	SM 5220D			
		Total Volatile Solids	SM 2540G			
		Total Solids	SM 2540B			
		Free Liquids	SW846 9095B			
Liquid waste characterization	Remedial action team, offsite disposal facility	Ignitability	SW846 1010	See Worksheet #15 for project QLs	Parameters required by offsite disposal facility for waste characterization.	Will be used to characterize the waste for disposal at the appropriate offsite disposal facility
		pH	SW846 9045D SW846 9040C			
		Reactive Cyanide	SW846 Section 7.4.3.2			
		Reactive Sulfide	SW846 Section 7.4.4.3			
		TCLP Metals and Mercury	SW846 6010C/7470A			
		TCLP SVOCs	SW846 8270D			
		TCLP Pesticides	SW846 8081B			
		TCLP Herbicides	SW846 8151A			
		PCBs	SW846 8082A			

APPENDIX 3

DATA QUALITY OBJECTIVES

Appendix 3

Data Quality Objectives

Operable Unit 1 – Soil Remediation
Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Data quality objectives (DQOs) are used to help decision makers collect data of the right type, quality, and quantity to support decisions. The approach to developing DQOs is designed to take decision makers through a strategic planning process from broad project goals through a number of refining steps towards generating environmental data that will be appropriate to making the decisions needed to reach the goals.

1.0 State the Problem

Work is being conducted at properties located in the vicinity of the former Cornell-Dubilier Electronics facility due to contamination found in soil associated with past industrial operations conducted at the facility. Elevated concentrations of contaminants of concern in soils, primarily polychlorinated biphenyls (PCBs) may pose a threat through direct contact and as a source of contamination to groundwater.

This task addresses the remediation of soils associated with Operable Unit 1 (OU-1) of the site. The USEPA signed a Record of Decision (ROD) for OU-1 in September 2003. The objectives of the current remedial action are:

- Excavation of an estimated 2,500 cubic yards of contaminated soil, backfilling with clean fill, and property restoration, as necessary.
- Transportation of contaminated soil to an offsite facility for disposal, with treatment as necessary.

2.0 Identify the Decision

To meet the objectives, the following fundamental questions will need to be answered during the investigation:

- Do backfill and topsoil materials brought in from offsite sources pose a risk to human health or the environment?

- What are the disposal facility requirements to classify the soils and debris excavated from the site under Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) regulations?

3.0 Identify the Inputs to the Decision

The following inputs are required to answer the fundamental questions identified in Step 2 above:

- Review existing data. This includes analytical data as well as past practice and process history.
- Determine the appropriate analytical methods, keeping in mind that the methods must meet the sensitivities of the applicable regulatory limits and remediation goals.
- Collect soil samples to fully characterize the soils such that the offsite disposal facilities are satisfied.
- Collect backfill and topsoil samples to demonstrate that materials brought onsite are not hazardous to human health or the environment.

4.0 Define the Boundaries of the Study

The physical boundaries of the investigation have been defined as OU-1.

5.0 Develop a Decision Rule

The purpose of this step is to integrate the outputs from the previous steps into a statement that defines the conditions that would cause the decision makers to choose among alternative actions. The following primary decision rules will be used to answer the fundamental questions:

- Waste characterization sample results will be compared against the 40CFR261 *Characteristics of Hazardous Waste* and 40CFR761 *PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* to determine the disposal requirements. Any materials containing Resource Conservation and Recovery Act (RCRA) regulated constituents at concentrations greater than toxicity characteristic leachate procedure (TCLP) criteria will be disposed of as RCRA hazardous waste. Any materials containing concentrations of total PCBs greater than the regulatory standards will be disposed of as Toxic Substance Control Act (TSCA) regulated PCB remediation wastes. Any materials exceeding both criteria will be disposed of as RCRA/TSCA waste.

- Material used for backfill will be analyzed for organic compounds, inorganic compounds, and radioisotopes to ensure that the fill material does not exceed the cleanup criteria in New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Remediation Standards (RDCSRS) for chemical parameters and NJAC 7:28-12 for naturally occurring radioactive material (NORM).

6.0 Specify Limits on Decision Errors

This step is to specify the decision maker's acceptable limits on decision errors, which are used to establish appropriate performance goals for limiting uncertainty in environmental data. These acceptable limits on decision errors allow decision makers to generate effective sampling designs while limiting uncertainties in the collected data.

There are two types of decision errors applicable to estimating the true value of a population: 1) sampling design error, which occurs when the sampling design is unable to capture the complete state of natural variability over space and time; and 2) measurement error, which refers to a combination of random and systematic errors. The combination of sampling design error and measurement error is termed as the total study error. Since it is impossible to eliminate error in measurement data, two types of decision errors can occur: Type I and Type II. A Type I or false positive error occurs when a null hypothesis is true, but is mistakenly rejected. A Type II or false negative error occurs when a null hypothesis is false, but is not rejected.

In this investigation, the false rejection error is concluding that soils do not contain contaminants of concern with concentrations exceeding the action levels when there are actually contaminants of concern with concentrations that exceeded the action levels. The false acceptance error is concluding that the soils do contain contaminants of concern with concentrations that exceeded the action levels when there are actually no contaminants of concern with concentrations that exceeded the action levels.

The consequences of the false acceptance decision will be unnecessary expenditure of resources such as funding, personnel, and time. The consequence of the false rejection error is that contaminants of concern in soils will not be remediated and will pose unacceptable risk to the environment or human health. Because of the possible severity of the false rejection error consequence, the false acceptance error is more tolerable than the false rejection error. The false acceptance decision error will occur when the

analytical results are biased high and the false rejection decision error will occur when the analytical results are biased low.

7.0 Optimize the Design for Obtaining Data

This step involves identifying the most resource effective sampling and analysis design for generating data that are expected to satisfy project DQOs.

The consequence of the decision error will need to be balanced against the cost of limiting the possibility of these errors. These errors will be managed by the use of precise and accurate analytical methods, sampling techniques (e.g., compositing for waste characterization), and duplicate sample analysis. To minimize unacceptable errors, laboratory analyses with a high degree of confidence and extensive quality assurance and quality control (QA/QC) and documentation procedures will be utilized.

APPENDIX 4

MEASUREMENT PERFORMANCE CRITERIA

Project Target Analyte Reporting Limit, Blank Contamination, and Lab & Field Duplicate RPD Criteria

eQapp Name: Cornell_OU1_Spectrum (071012)
Description: Cornell_OU1_Spectrum (created 071012)

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 160.3 Matrix: AQ							
TOTAL SOLIDS	TSO	4.0		mg/L	5.00	20.00	35.00
Method: 1664A Matrix: AQ							
OIL & GREASE	OILGREASE	5.0		mg/L	5.00	18.00	35.00
Method: 6010B Matrix: SO							
ALUMINUM	7429-90-5	10		mg/Kg	5.00	20.00	35.00
ANTIMONY	7440-36-0	1		mg/Kg	5.00	20.00	35.00
ARSENIC	7440-38-2	1		mg/Kg	5.00	20.00	35.00
BARIUM	7440-39-3	10		mg/Kg	5.00	20.00	35.00
BERYLLIUM	7440-41-7	0.25		mg/Kg	5.00	20.00	35.00
CADMIUM	7440-43-9	0.25		mg/Kg	5.00	20.00	35.00
CALCIUM	7440-70-2	40		mg/Kg	5.00	20.00	35.00
CHROMIUM	7440-47-3	1		mg/Kg	5.00	20.00	35.00
COBALT	7440-48-4	2.5		mg/Kg	5.00	20.00	35.00
COPPER	7440-50-8	1.5		mg/Kg	5.00	20.00	35.00
IRON	7439-89-6	150		mg/Kg	5.00	20.00	35.00
LEAD	7439-92-1	0.5		mg/Kg	5.00	20.00	35.00
MAGNESIUM	7439-95-4	50		mg/Kg	5.00	20.00	35.00
MANGANESE	7439-96-5	2.5		mg/Kg	5.00	20.00	35.00
NICKEL	7440-02-0	2.5		mg/Kg	5.00	20.00	35.00
POTASSIUM	7440-09-7	50		mg/Kg	5.00	20.00	35.00
SELENIUM	7782-49-2	1.5		mg/Kg	5.00	20.00	35.00
SILVER	7440-22-4	1.5		mg/Kg	5.00	20.00	35.00
SODIUM	7440-23-5	50		mg/Kg	5.00	20.00	35.00
THALLIUM	7440-28-0	1		mg/Kg	5.00	20.00	35.00
VANADIUM	7440-62-2	2.5		mg/Kg	5.00	20.00	35.00
ZINC	7440-66-6	2.5		mg/Kg	5.00	20.00	35.00
Method: 6010B-TCLP Matrix: SO							

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 6010B-TCLP Matrix: SO							
ARSENIC	7440-38-2	20		ug/L	5.00	20.00	35.00
BARIUM	7440-39-3	200		ug/L	5.00	20.00	35.00
CADMIUM	7440-43-9	5		ug/L	5.00	20.00	35.00
CHROMIUM	7440-47-3	20		ug/L	5.00	20.00	35.00
LEAD	7439-92-1	10		ug/L	5.00	20.00	35.00
SELENIUM	7782-49-2	30		ug/L	5.00	20.00	35.00
SILVER	7440-22-4	30		ug/L	5.00	20.00	35.00
Method: 7470A-TCLP Matrix: SO							
MERCURY	7439-97-6	0.20		ug/L	5.00	20.00	35.00
Method: 7471A Matrix: SO							
MERCURY	7439-97-6	0.033		mg/Kg	5.00	20.00	35.00
Method: 8081A Matrix: SO							
4,4'-DDD	72-54-8	3.3		ug/Kg	5.00		35.00
4,4'-DDE	72-55-9	3.3		ug/Kg	5.00		35.00
4,4'-DDT	50-29-3	3.3		ug/Kg	5.00		35.00
ALDRIN	309-00-2	1.7		ug/Kg	5.00		35.00
ALPHA-BHC	319-84-6	1.7		ug/Kg	5.00		35.00
ALPHA-CHLORDANE	5103-71-9	1.7		ug/Kg	5.00		35.00
BETA-BHC	319-85-7	1.7		ug/Kg	5.00		35.00
DELTA-BHC	319-86-8	1.7		ug/Kg	5.00		35.00
DIELDRIN	60-57-1	3.3		ug/Kg	5.00		35.00
ENDOSULFAN I	959-98-8	1.7		ug/Kg	5.00		35.00
ENDOSULFAN II	33213-65-9	3.3		ug/Kg	5.00		35.00
ENDOSULFAN SULFATE	1031-07-8	3.3		ug/Kg	5.00		35.00
ENDRIN	72-20-8	3.3		ug/Kg	5.00		35.00
ENDRIN ALDEHYDE	7421-93-4	3.3		ug/Kg	5.00		35.00
ENDRIN KETONE	53494-70-5	3.3		ug/Kg	5.00		35.00
GAMMA-BHC	58-89-9	1.7		ug/Kg	5.00		35.00
GAMMA-CHLORDANE	5103-74-2	1.7		ug/Kg	5.00		35.00
HEPTACHLOR	76-44-8	1.7		ug/Kg	5.00		35.00
HEPTACHLOR EPOXIDE	1024-57-3	1.7		ug/Kg	5.00		35.00
METHOXYCHLOR	72-43-5	17		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8081A Matrix: SO							
TOXAPHENE	8001-35-2	170		ug/Kg	5.00		35.00
Method: 8081A-TCLP Matrix: SO							
CHLORDANE (TECHNICAL)	57-74-9	2.5		ug/L	5.00	25.00	35.00
ENDRIN	72-20-8	0.1		ug/L	5.00	30.00	35.00
GAMMA-BHC	58-89-9	0.05		ug/L	5.00	30.00	35.00
HEPTACHLOR	76-44-8	0.05		ug/L	5.00	30.00	35.00
HEPTACHLOR EPOXIDE	1024-57-3	0.05		ug/L	5.00	30.00	35.00
METHOXYCHLOR	72-43-5	0.5		ug/L	5.00	30.00	35.00
TOXAPHENE	8001-35-2	5		ug/L	5.00	25.00	35.00
Method: 8082 Matrix: SO							
AROCLOR 1016	12674-11-2	33		ug/Kg	5.00		35.00
AROCLOR 1221	11104-28-2	33		ug/Kg	5.00		35.00
AROCLOR 1232	11141-16-5	33		ug/Kg	5.00		35.00
AROCLOR 1242	53469-21-9	33		ug/Kg	5.00		35.00
AROCLOR 1248	12672-29-6	33		ug/Kg	5.00		35.00
AROCLOR 1254	11097-69-1	33		ug/Kg	5.00		35.00
AROCLOR 1260	11096-82-5	33		ug/Kg	5.00		35.00
Method: 8151A-TCLP Matrix: SO							
2,4,5-TP	93-72-1	0.33		ug/L	5.00	30.00	35.00
2,4-D	94-75-7	3.3		ug/L	5.00	30.00	35.00
Method: 8260B Matrix: SO							
1,1,1,2-TETRACHLOROETHANE	630-20-6	5		ug/Kg	5.00		35.00
1,1,1-TRICHLOROETHANE	71-55-6	5		ug/Kg	5.00		35.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	5		ug/Kg	5.00		35.00
1,1,2-TRICHLOROETHANE	79-00-5	5		ug/Kg	5.00		35.00
1,1-DICHLOROETHANE	75-34-3	5		ug/Kg	5.00		35.00
1,1-DICHLOROETHENE	75-35-4	5		ug/Kg	5.00		35.00
1,1-DICHLOROPROPENE	563-58-6	5		ug/Kg	5.00		35.00
1,2,3-TRICHLOROBENZENE	87-61-6	5		ug/Kg	5.00		35.00
1,2,3-TRICHLOROPROPANE	96-18-4	5		ug/Kg	5.00		35.00
1,2,4-TRICHLOROBENZENE	120-82-1	5		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B **Matrix: SO**							
1,2,4-TRIMETHYLBENZENE	95-63-6	5		ug/Kg	5.00		35.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5		ug/Kg	5.00		35.00
1,2-DIBROMOETHANE	106-93-4	5		ug/Kg	5.00		35.00
1,2-DICHLOROBENZENE	95-50-1	5		ug/Kg	5.00		35.00
1,2-DICHLOROETHANE	107-06-2	5		ug/Kg	5.00		35.00
1,2-DICHLOROPROPANE	78-87-5	5		ug/Kg	5.00		35.00
1,3,5-TRIMETHYLBENZENE	108-67-8	5		ug/Kg	5.00		35.00
1,3-DICHLOROBENZENE	541-73-1	5		ug/Kg	5.00		35.00
1,3-DICHLOROPROPANE	142-28-9	5		ug/Kg	5.00		35.00
1,4-DICHLOROBENZENE	106-46-7	5		ug/Kg	5.00		35.00
2,2-DICHLOROPROPANE	594-20-7	5		ug/Kg	5.00		35.00
2-BUTANONE	78-93-3	5		ug/Kg	5.00		35.00
2-CHLOROTOLUENE	95-49-8	5		ug/Kg	5.00		35.00
2-HEXANONE	591-78-6	5		ug/Kg	5.00		35.00
4-CHLOROTOLUENE	106-43-4	5		ug/Kg	5.00		35.00
4-ISOPROPYLTOLUENE	99-87-6	5		ug/Kg	5.00		35.00
4-METHYL-2-PENTANONE	108-10-1	5		ug/Kg	5.00		35.00
ACETONE	67-64-1	5		ug/Kg	10.00		35.00
ACROLEIN	107-02-8	25		ug/Kg	5.00		35.00
ACRYLONITRILE	107-13-1	5		ug/Kg	5.00		35.00
BENZENE	71-43-2	5		ug/Kg	5.00		35.00
BROMOBENZENE	108-86-1	5		ug/Kg	5.00		35.00
BROMOCHLOROMETHANE	74-97-5	5		ug/Kg	5.00		35.00
BROMODICHLOROMETHANE	75-27-4	5		ug/Kg	5.00		35.00
BROMOFORM	75-25-2	5		ug/Kg	5.00		35.00
BROMOMETHANE	74-83-9	5		ug/Kg	5.00		35.00
CARBON DISULFIDE	75-15-0	5		ug/Kg	5.00		35.00
CARBON TETRACHLORIDE	56-23-5	5		ug/Kg	5.00		35.00
CHLOROBENZENE	108-90-7	5		ug/Kg	5.00		35.00
CHLOROETHANE	75-00-3	5		ug/Kg	5.00		35.00
CHLOROFORM	67-66-3	5		ug/Kg	5.00		35.00
CHLOROMETHANE	74-87-3	5		ug/Kg	5.00		35.00
CIS-1,2-DICHLOROETHENE	156-59-2	5		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B **Matrix: SO**							
CIS-1,3-DICHLOROPROPENE	10061-01-5	5		ug/Kg	5.00		35.00
DIBROMOCHLOROMETHANE	124-48-1	5		ug/Kg	5.00		35.00
DIBROMOMETHANE	74-95-3	5		ug/Kg	5.00		35.00
DICHLORODIFLUOROMETHANE	75-71-8	5		ug/Kg	5.00		35.00
ETHYLBENZENE	100-41-4	5		ug/Kg	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	5		ug/Kg	5.00		35.00
IODOMETHANE	74-88-4	5		ug/Kg	5.00		35.00
ISOPROPYLBENZENE	98-82-8	5		ug/Kg	5.00		35.00
m,p-xylene	108-38-3	5		ug/Kg	5.00		35.00
METHYL ACETATE	79-20-9	5		ug/Kg	5.00		35.00
METHYLENE CHLORIDE	75-09-2	5		ug/Kg	10.00		35.00
methyl-t-butyl ether	1634-04-4	5		ug/Kg	5.00		35.00
NAPHTHALENE	91-20-3	5		ug/Kg	5.00		35.00
N-BUTYLBENZENE	104-51-8	5		ug/Kg	5.00		35.00
N-PROPYLBENZENE	103-65-1	5		ug/Kg	5.00		35.00
O-XYLENE	95-47-6	5		ug/Kg	5.00		35.00
SEC-BUTYLBENZENE	135-98-8	5		ug/Kg	5.00		35.00
STYRENE	100-42-5	5		ug/Kg	5.00		35.00
TERT-BUTYL ALCOHOL	75-65-0	10		ug/Kg	5.00		35.00
TERT-BUTYLBENZENE	98-06-6	5		ug/Kg	5.00		35.00
TETRACHLOROETHENE	127-18-4	5		ug/Kg	5.00		35.00
TOLUENE	108-88-3	5		ug/Kg	5.00		35.00
TRANS-1,2-DICHLOROETHENE	156-60-5	5		ug/Kg	5.00		35.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	5		ug/Kg	5.00		35.00
TRICHLOROETHENE	79-01-6	5		ug/Kg	5.00		35.00
TRICHLOROFLUOROMETHANE	75-69-4	5		ug/Kg	5.00		35.00
VINYL ACETATE	108-05-4	5		ug/Kg	5.00		35.00
VINYL CHLORIDE	75-01-4	5		ug/Kg	5.00		35.00
Xylene (Total)	1330-20-7	5		ug/Kg	5.00		35.00
Method: 8260B-TCLP **Matrix: SO**							
1,1-DICHLOROETHENE	75-35-4	5		ug/L	5.00	40.00	40.00
1,2-DICHLOROETHANE	107-06-2	5		ug/L	5.00	40.00	40.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B-TCLP Matrix: SO							
1,4-DICHLOROBENZENE	106-46-7	5		ug/L	5.00	40.00	40.00
2-BUTANONE	78-93-3	5		ug/L	10.00	40.00	40.00
BENZENE	71-43-2	5		ug/L	5.00	40.00	40.00
CARBON TETRACHLORIDE	56-23-5	5		ug/L	5.00	40.00	40.00
CHLOROBENZENE	108-90-7	5		ug/L	5.00	40.00	40.00
CHLOROFORM	67-66-3	5		ug/L	5.00	40.00	40.00
TETRACHLOROETHENE	127-18-4	5		ug/L	5.00	40.00	40.00
TRICHLOROETHENE	79-01-6	5		ug/L	5.00	40.00	40.00
VINYL CHLORIDE	75-01-4	5		ug/L	5.00	40.00	40.00
Method: 8270C Matrix: SO							
1,1'-Biphenyl	92-52-4	330		ug/Kg	5.00		35.00
1,2,4,5-TETRACHLOROBENZENE	95-94-3	330		ug/Kg	5.00		35.00
1,2,4-TRICHLOROBENZENE	120-82-1	330		ug/Kg	5.00		35.00
1,2-DICHLOROBENZENE	95-50-1	330		ug/Kg	5.00		35.00
1,2-DIPHENYLHYDRAZINE	122-66-7	330		ug/Kg	5.00		35.00
1,3-DICHLOROBENZENE	541-73-1	330		ug/Kg	5.00		35.00
1,4-DICHLOROBENZENE	106-46-7	330		ug/Kg	5.00		35.00
2,4,5-TRICHLOROPHENOL	95-95-4	670		ug/Kg	5.00		35.00
2,4,6-TRICHLOROPHENOL	88-06-2	330		ug/Kg	5.00		35.00
2,4-DICHLOROPHENOL	120-83-2	330		ug/Kg	5.00		35.00
2,4-DIMETHYLPHENOL	105-67-9	330		ug/Kg	5.00		35.00
2,4-DINITROPHENOL	51-28-5	670		ug/Kg	5.00		35.00
2,4-DINITROTOLUENE	121-14-2	330		ug/Kg	5.00		35.00
2,6-DINITROTOLUENE	606-20-2	330		ug/Kg	5.00		35.00
2-CHLORONAPHTHALENE	91-58-7	330		ug/Kg	5.00		35.00
2-CHLOROPHENOL	95-57-8	330		ug/Kg	5.00		35.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	670		ug/Kg	5.00		35.00
2-METHYLNAPHTHALENE	91-57-6	330		ug/Kg	5.00		35.00
2-METHYLPHENOL	95-48-7	330		ug/Kg	5.00		35.00
2-NITROANILINE	88-74-4	670		ug/Kg	5.00		35.00
2-NITROPHENOL	88-75-5	330		ug/Kg	5.00		35.00
3,3'-DICHLOROBENZIDINE	91-94-1	330		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C **Matrix: SO**							
3-NITROANILINE	99-09-2	670		ug/Kg	5.00		35.00
4-BROMOPHENYL PHENYL ETHER	101-55-3	330		ug/Kg	5.00		35.00
4-CHLORO-3-METHYLPHENOL	59-50-7	330		ug/Kg	5.00		35.00
4-CHLOROANILINE	106-47-8	330		ug/Kg	5.00		35.00
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	330		ug/Kg	5.00		35.00
4-METHYLPHENOL	106-44-5	330		ug/Kg	5.00		35.00
4-NITROANILINE	100-01-6	670		ug/Kg	5.00		35.00
4-NITROPHENOL	100-02-7	670		ug/Kg	5.00		35.00
ACENAPHTHENE	83-32-9	330		ug/Kg	5.00		35.00
ACENAPHTHYLENE	208-96-8	330		ug/Kg	5.00		35.00
ACETOPHENONE	98-86-2	330		ug/Kg	5.00		35.00
ANTHRACENE	120-12-7	330		ug/Kg	5.00		35.00
ATRAZINE	1912-24-9	330		ug/Kg	5.00		35.00
Azobenzene	103-33-3	330		ug/Kg	5.00		35.00
BENZALDEHYDE	100-52-7	330		ug/Kg	5.00		35.00
BENZIDINE	92-87-5	330		ug/Kg	5.00		35.00
BENZO(A)ANTHRACENE	56-55-3	330		ug/Kg	5.00		35.00
BENZO(A)PYRENE	50-32-8	330		ug/Kg	5.00		35.00
BENZO(B)FLUORANTHENE	205-99-2	330		ug/Kg	5.00		35.00
BENZO(G,H,I)PERYLENE	191-24-2	330		ug/Kg	5.00		35.00
BENZO(K)FLUORANTHENE	207-08-9	330		ug/Kg	5.00		35.00
BIS(2-CHLOROETHOXY)METHANE	111-91-1	330		ug/Kg	5.00		35.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	330		ug/Kg	5.00		35.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	330		ug/Kg	5.00		35.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	330		ug/Kg	5.00		35.00
BUTYLBENZYL PHTHALATE	85-68-7	330		ug/Kg	5.00		35.00
CAPROLACTAM	105-60-2	330		ug/Kg	5.00		35.00
CARBAZOLE	86-74-8	330		ug/Kg	5.00		35.00
CHRYSENE	218-01-9	330		ug/Kg	5.00		35.00
DIBENZ(A,H)ANTHRACENE	53-70-3	330		ug/Kg	5.00		35.00
DIBENZOFURAN	132-64-9	330		ug/Kg	5.00		35.00
DIETHYL PHTHALATE	84-66-2	330		ug/Kg	5.00		35.00
DIMETHYL PHTHALATE	131-11-3	330		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C **Matrix: SO**							
DI-N-BUTYL PHTHALATE	84-74-2	330		ug/Kg	5.00		35.00
DI-N-OCTYL PHTHALATE	117-84-0	330		ug/Kg	5.00		35.00
FLUORANTHENE	206-44-0	330		ug/Kg	5.00		35.00
FLUORENE	86-73-7	330		ug/Kg	5.00		35.00
HEXACHLOROBENZENE	118-74-1	330		ug/Kg	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	330		ug/Kg	5.00		35.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	330		ug/Kg	5.00		35.00
HEXACHLOROETHANE	67-72-1	330		ug/Kg	5.00		35.00
INDENO(1,2,3-CD)PYRENE	193-39-5	330		ug/Kg	5.00		35.00
ISOPHORONE	78-59-1	330		ug/Kg	5.00		35.00
NAPHTHALENE	91-20-3	330		ug/Kg	5.00		35.00
NITROBENZENE	98-95-3	330		ug/Kg	5.00		35.00
N-NITROSODIMETHYLAMINE	62-75-9	330		ug/Kg	5.00		35.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	330		ug/Kg	5.00		35.00
N-NITROSODIPHENYLAMINE	86-30-6	330		ug/Kg	5.00		35.00
PENTACHLOROPHENOL	87-86-5	670		ug/Kg	5.00		35.00
PHENANTHRENE	85-01-8	330		ug/Kg	5.00		35.00
PHENOL	108-95-2	330		ug/Kg	5.00		35.00
PYRENE	129-00-0	330		ug/Kg	5.00		35.00
Method: 8270C-TCLP **Matrix: SO**							
1,4-DICHLOROBENZENE	106-46-7	33		ug/L	5.00		35.00
2,4,5-TRICHLOROPHENOL	95-95-4	66		ug/L	5.00		35.00
2,4,6-TRICHLOROPHENOL	88-06-2	33		ug/L	5.00		35.00
2,4-DINITROTOLUENE	121-14-2	33		ug/L	5.00		35.00
2-METHYLPHENOL	95-48-7	33		ug/L	5.00		35.00
3&4-Methylphenol	106-44-5	33		ug/L	5.00		35.00
HEXACHLOROBENZENE	118-74-1	33		ug/L	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	33		ug/L	5.00		35.00
HEXACHLOROETHANE	67-72-1	33		ug/L	5.00		35.00
NITROBENZENE	98-95-3	33		ug/L	5.00		35.00
PENTACHLOROPHENOL	87-86-5	66		ug/L	5.00		35.00
PYRIDINE	110-86-1	33		ug/L	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 9012 Matrix: SO							
CYANIDE	57-12-5	1.0		mg/Kg	5.00	20.00	35.00
Method: 9045 Matrix: SO							
pH	ADR-04-001	1		pH	5.00	20.00	35.00
Method: DOE 4.5.2.3 Matrix: SO							
Ac-228	14331-83-0	0.1		pCi/g	5.00	3.92	50.00
Bi-212	14913-49-6	0.1		pCi/g	5.00	3.92	50.00
Bi-214	14733-03-0	0.1		pCi/g	5.00	3.92	50.00
K-40	13966-00-2	0.1		pCi/g	5.00	3.92	50.00
Pa-234m	15100-28-4	0.1		pCi/g	5.00	3.92	50.00
Pb-212	15092-94-1	0.1		pCi/g	5.00	3.92	50.00
Pb-214	15067-28-4	0.1		pCi/g	5.00	3.92	50.00
Ra-226	13982-63-3	0.1		pCi/g	5.00	3.92	50.00
Ra-228	15262-20-1	0.1		pCi/g	5.00	3.92	50.00
Th-234	15065-10-8	0.1		pCi/g	5.00	3.92	50.00
Thorium-232	7440-29-1	0.1		pCi/g	5.00	3.92	50.00
Tl-208	14913-50-9	0.1		pCi/g	5.00	3.92	50.00
U-235	15117-96-1	0.1		pCi/g	5.00	3.92	50.00
Method: EPA 1010 Matrix: SO							
IGNITABILITY	10-36-6	200		deg F	5.00	25.00	25.00
Method: SM 2540B Matrix: AQ							
TOTAL SOLIDS	TSO						
Method: SM 2540G Matrix: SO							
TOTAL VOLATILE SOLIDS	TVS			PERCENT	5.00	0.00	0.00
Method: SM 4500-H+ B Matrix: AQ							
pH	ADR-04-001	1		pH	5.00	20.00	50.00
Method: SM 4500-NH3 D Matrix: AQ							
AMMONIA AS N	7664-41-7	0.20		mg/L	5.00	20.00	35.00
Method: SM 5220D Matrix: AQ							
CHEMICAL OXYGEN DEMAND	COD	20		mg/L	5.00	20.00	35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: SW846_7.3.1 Matrix: SO							
Reactive Cyanide	57-12-5	1		mg/kg	5.00	20.00	50.00
Method: SW846_7.3.2 Matrix: SO							
Reactive Sulfide	18496-25-8	1		mg/kg	5.00	20.00	50.00

Project Accuracy and Precision Report

eQapp Name: Cornell_OU1_Spectrum (071012)
Description: Cornell_OU1_Spectrum (created 071012)

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 160.3	**Matrix: AQ**					
QC Type: LCS						
TOTAL SOLIDS	TSO	50.00	80.00	120.00		
Method: 1664A	**Matrix: AQ**					
QC Type: LCS						
OIL & GREASE	OILGREASE	10.00	78.00	114.00		18.00
QC Type: MS						
OIL & GREASE	OILGREASE	10.00	78.00	114.00		18.00
Method: 6010B	**Matrix: SO**					
QC Type: LCS						
ALUMINUM	7429-90-5	10.00	80.00	120.00		
ANTIMONY	7440-36-0	10.00	80.00	120.00		
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
BERYLLIUM	7440-41-7	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CALCIUM	7440-70-2	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
COBALT	7440-48-4	10.00	80.00	120.00		
COPPER	7440-50-8	10.00	80.00	120.00		
IRON	7439-89-6	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
MAGNESIUM	7439-95-4	10.00	80.00	120.00		
MANGANESE	7439-96-5	10.00	80.00	120.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 6010B	**Matrix: SO**					
QC Type: LCS						
NICKEL	7440-02-0	10.00	80.00	120.00		
POTASSIUM	7440-09-7	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	75.00	120.00		
SODIUM	7440-23-5	10.00	80.00	120.00		
THALLIUM	7440-28-0	10.00	80.00	120.00		
VANADIUM	7440-62-2	10.00	80.00	120.00		
ZINC	7440-66-6	10.00	80.00	120.00		
QC Type: MS						
ALUMINUM	7429-90-5	10.00	75.00	125.00		
ANTIMONY	7440-36-0	10.00	75.00	125.00		
ARSENIC	7440-38-2	10.00	75.00	125.00		
BARIUM	7440-39-3	10.00	75.00	125.00		
BERYLLIUM	7440-41-7	10.00	75.00	125.00		
CADMIUM	7440-43-9	10.00	75.00	125.00		
CALCIUM	7440-70-2	10.00	75.00	125.00		
CHROMIUM	7440-47-3	10.00	75.00	125.00		
COBALT	7440-48-4	10.00	75.00	125.00		
COPPER	7440-50-8	10.00	75.00	125.00		
IRON	7439-89-6	10.00	75.00	125.00		
LEAD	7439-92-1	10.00	75.00	125.00		
MAGNESIUM	7439-95-4	10.00	75.00	125.00		
MANGANESE	7439-96-5	10.00	75.00	125.00		
NICKEL	7440-02-0	10.00	75.00	125.00		
POTASSIUM	7440-09-7	10.00	75.00	125.00		
SELENIUM	7782-49-2	10.00	75.00	125.00		
SILVER	7440-22-4	10.00	75.00	125.00		
SODIUM	7440-23-5	10.00	75.00	125.00		
THALLIUM	7440-28-0	10.00	75.00	125.00		
VANADIUM	7440-62-2	10.00	75.00	125.00		
ZINC	7440-66-6	10.00	75.00	125.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 6010B-TCLP	**Matrix: SO**					
QC Type: LCS						
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	80.00	120.00		
QC Type: MS						
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	80.00	120.00		
Method: 7470A-TCLP	**Matrix: SO**					
QC Type: LCS						
MERCURY	7439-97-6	10.00	80.00	120.00		
QC Type: MS						
MERCURY	7439-97-6	10.00	80.00	120.00		
Method: 7471A	**Matrix: SO**					
QC Type: LCS						
MERCURY	7439-97-6	10.00	80.00	120.00		
QC Type: MS						
MERCURY	7439-97-6	10.00	80.00	120.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A	**Matrix: SO**					
QC Type: LCS						
4,4'-DDD	72-54-8	10.00	30.00	135.00		30.00
4,4'-DDE	72-55-9	10.00	70.00	125.00		30.00
4,4'-DDT	50-29-3	10.00	45.00	140.00		30.00
ALDRIN	309-00-2	10.00	45.00	140.00		30.00
ALPHA-BHC	319-84-6	10.00	60.00	125.00		30.00
ALPHA-CHLORDANE	5103-71-9	10.00	65.00	120.00		30.00
BETA-BHC	319-85-7	10.00	60.00	125.00		30.00
DELTA-BHC	319-86-8	10.00	55.00	130.00		30.00
DIELDRIN	60-57-1	10.00	65.00	125.00		30.00
ENDOSULFAN I	959-98-8	10.00	15.00	135.00		30.00
ENDOSULFAN II	33213-65-9	10.00	35.00	140.00		30.00
ENDOSULFAN SULFATE	1031-07-8	10.00	60.00	135.00		30.00
ENDRIN	72-20-8	10.00	60.00	135.00		30.00
ENDRIN ALDEHYDE	7421-93-4	10.00	35.00	145.00		30.00
ENDRIN KETONE	53494-70-5	10.00	65.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	60.00	125.00		30.00
GAMMA-CHLORDANE	5103-74-2	10.00	65.00	125.00		30.00
HEPTACHLOR	76-44-8	10.00	50.00	140.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	65.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	145.00		30.00
QC Type: MS						
4,4'-DDD	72-54-8	10.00	30.00	135.00		30.00
4,4'-DDE	72-55-9	10.00	70.00	125.00		30.00
4,4'-DDT	50-29-3	10.00	45.00	140.00		30.00
ALDRIN	309-00-2	10.00	45.00	140.00		30.00
ALPHA-BHC	319-84-6	10.00	60.00	125.00		30.00
ALPHA-CHLORDANE	5103-71-9	10.00	65.00	120.00		30.00
BETA-BHC	319-85-7	10.00	60.00	125.00		30.00
DELTA-BHC	319-86-8	10.00	55.00	130.00		30.00
DIELDRIN	60-57-1	10.00	65.00	125.00		30.00
ENDOSULFAN I	959-98-8	10.00	15.00	135.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A	**Matrix: SO**					
QC Type: MS						
ENDOSULFAN II	33213-65-9	10.00	35.00	140.00		30.00
ENDOSULFAN SULFATE	1031-07-8	10.00	60.00	135.00		30.00
ENDRIN	72-20-8	10.00	60.00	135.00		30.00
ENDRIN ALDEHYDE	7421-93-4	10.00	35.00	145.00		30.00
ENDRIN KETONE	53494-70-5	10.00	65.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	60.00	125.00		30.00
GAMMA-CHLORDANE	5103-74-2	10.00	65.00	120.00		30.00
HEPTACHLOR	76-44-8	10.00	50.00	140.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	65.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	145.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	55.00	130.00		
Tetrachloro-meta-xylene	877-09-8	10.00	14.00	113.00		
Method: 8081A-TCLP	**Matrix: SO**					
QC Type: LCS						
ENDRIN	72-20-8	10.00	55.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	25.00	135.00		30.00
HEPTACHLOR	76-44-8	10.00	40.00	130.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	60.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	150.00		30.00
QC Type: MS						
ENDRIN	72-20-8	10.00	55.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	25.00	135.00		30.00
HEPTACHLOR	76-44-8	10.00	40.00	130.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	60.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	150.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A-TCLP	**Matrix: SO**					
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	40.00	135.00		
TETRACHLORO-M-XYLENE	877-09-8	10.00	32.00	89.00		
Method: 8082	**Matrix: SO**					
QC Type: LCS						
AROCLOR 1016	12674-11-2	10.00	40.00	140.00		30.00
AROCLOR 1260	11096-82-5	10.00	60.00	130.00		30.00
QC Type: MS						
AROCLOR 1016	12674-11-2	10.00	40.00	140.00		30.00
AROCLOR 1260	11096-82-5	10.00	60.00	130.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	60.00	125.00		
TETRACHLORO-M-XYLENE	877-09-8	10.00	27.00	120.00		
Method: 8151A-TCLP	**Matrix: SO**					
QC Type: LCS						
2,4,5-TP	93-72-1	10.00	36.00	136.00		30.00
2,4-D	94-75-7	10.00	24.00	133.00		30.00
QC Type: MS						
2,4,5-TP	93-72-1	10.00	36.00	136.00		30.00
2,4-D	94-75-7	10.00	24.00	133.00		30.00
QC Type: SURR						
2,4-DCPAA	19719-28-9	10.00	10.00	105.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: LCS						
1,1,1,2-TETRACHLOROETHANE	630-20-6	10.00	75.00	125.00		40.00
1,1,1-TRICHLOROETHANE	71-55-6	10.00	70.00	135.00		40.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.00	55.00	130.00		40.00
1,1,2-TRICHLOROETHANE	79-00-5	10.00	60.00	125.00		40.00
1,1-DICHLOROETHANE	75-34-3	10.00	75.00	125.00		40.00
1,1-DICHLOROETHENE	75-35-4	10.00	65.00	135.00		40.00
1,1-DICHLOROPROPENE	563-58-6	10.00	70.00	135.00		40.00
1,2,3-TRICHLOROBENZENE	87-61-6	10.00	60.00	135.00		40.00
1,2,3-TRICHLOROPROPANE	96-18-4	10.00	65.00	130.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	65.00	130.00		40.00
1,2,4-TRIMETHYLBENZENE	95-63-6	10.00	65.00	135.00		40.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	10.00	40.00	135.00		40.00
1,2-DIBROMOETHANE	106-93-4	10.00	70.00	125.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	75.00	120.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	135.00		40.00
1,2-DICHLOROPROPANE	78-87-5	10.00	70.00	120.00		40.00
1,3,5-TRIMETHYLBENZENE	108-67-8	10.00	65.00	135.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	70.00	125.00		40.00
1,3-DICHLOROPROPANE	142-28-9	10.00	75.00	125.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	70.00	125.00		40.00
2,2-DICHLOROPROPANE	594-20-7	10.00	65.00	135.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	160.00		40.00
2-CHLOROTOLUENE	95-49-8	10.00	70.00	130.00		40.00
2-HEXANONE	591-78-6	10.00	45.00	145.00		40.00
4-CHLOROTOLUENE	106-43-4	10.00	75.00	125.00		40.00
4-ISOPROPYLTOLUENE	99-87-6	10.00	75.00	135.00		40.00
4-METHYL-2-PENTANONE	108-10-1	10.00	45.00	145.00		40.00
ACETONE	67-64-1	10.00	20.00	160.00		40.00
ACROLEIN	107-02-8	10.00	70.00	130.00		40.00
ACRYLONITRILE	107-13-1	10.00	70.00	130.00		40.00
BENZENE	71-43-2	10.00	75.00	125.00		40.00
BROMOBENZENE	108-86-1	10.00	65.00	120.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: LCS						
BROMOCHLOROMETHANE	74-97-5	10.00	70.00	125.00		40.00
BROMODICHLOROMETHANE	75-27-4	10.00	70.00	130.00		40.00
BROMOFORM	75-25-2	10.00	55.00	135.00		40.00
BROMOMETHANE	74-83-9	10.00	30.00	160.00		40.00
CARBON DISULFIDE	75-15-0	10.00	45.00	160.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	135.00		40.00
CHLOROBENZENE	108-90-7	10.00	75.00	125.00		40.00
CHLOROETHANE	75-00-3	10.00	40.00	155.00		40.00
CHLOROFORM	67-66-3	10.00	70.00	125.00		40.00
CHLOROMETHANE	74-87-3	10.00	50.00	130.00		40.00
CIS-1,2-DICHLOROETHENE	156-59-2	10.00	65.00	125.00		40.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.00	70.00	125.00		40.00
DIBROMOCHLOROMETHANE	124-48-1	10.00	65.00	130.00		40.00
DIBROMOMETHANE	74-95-3	10.00	75.00	130.00		40.00
DICHLORODIFLUOROMETHANE	75-71-8	10.00	35.00	135.00		40.00
ETHYLBENZENE	100-41-4	10.00	75.00	125.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	55.00	140.00		40.00
IODOMETHANE	74-88-4	10.00	70.00	126.00		40.00
ISOPROPYLBENZENE	98-82-8	10.00	75.00	130.00		40.00
m,p-xylene	108-38-3	10.00	80.00	125.00		40.00
METHYL ACETATE	79-20-9	10.00	70.00	130.00		40.00
METHYLENE CHLORIDE	75-09-2	10.00	55.00	140.00		40.00
methyl-t-butyl ether	1634-04-4	10.00	75.00	126.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	125.00		40.00
N-BUTYLBENZENE	104-51-8	10.00	65.00	140.00		40.00
N-PROPYLBENZENE	103-65-1	10.00	65.00	135.00		40.00
O-XYLENE	95-47-6	10.00	75.00	125.00		40.00
SEC-BUTYLBENZENE	135-98-8	10.00	65.00	130.00		40.00
STYRENE	100-42-5	10.00	75.00	125.00		40.00
TERT-BUTYL ALCOHOL	75-65-0	10.00	50.00	130.00		40.00
TERT-BUTYLBENZENE	98-06-6	10.00	65.00	130.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	65.00	140.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: LCS						
TOLUENE	108-88-3	10.00	70.00	125.00		40.00
TRANS-1,2-DICHLOROETHENE	156-60-5	10.00	65.00	135.00		40.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.00	65.00	125.00		40.00
TRICHLOROETHENE	79-01-6	10.00	75.00	125.00		40.00
TRICHLOROFLUOROMETHANE	75-69-4	10.00	25.00	185.00		40.00
VINYL ACETATE	108-05-4	10.00	65.00	138.00		40.00
VINYL CHLORIDE	75-01-4	10.00	60.00	125.00		40.00
Xylene (Total)	1330-20-7	10.00	83.00	125.00		40.00
QC Type: MS						
1,1,1,2-TETRACHLOROETHANE	630-20-6	10.00	75.00	125.00		40.00
1,1,1-TRICHLOROETHANE	71-55-6	10.00	70.00	135.00		40.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.00	55.00	130.00		40.00
1,1,2-TRICHLOROETHANE	79-00-5	10.00	60.00	125.00		40.00
1,1-DICHLOROETHANE	75-34-3	10.00	75.00	125.00		40.00
1,1-DICHLOROETHENE	75-35-4	10.00	65.00	135.00		40.00
1,1-DICHLOROPROPENE	563-58-6	10.00	70.00	135.00		40.00
1,2,3-TRICHLOROBENZENE	87-61-6	10.00	60.00	135.00		40.00
1,2,3-TRICHLOROPROPANE	96-18-4	10.00	65.00	130.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	65.00	130.00		40.00
1,2,4-TRIMETHYLBENZENE	95-63-6	10.00	65.00	135.00		40.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	10.00	40.00	135.00		40.00
1,2-DIBROMOETHANE	106-93-4	10.00	70.00	125.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	75.00	120.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	135.00		40.00
1,2-DICHLOROPROPANE	78-87-5	10.00	70.00	120.00		40.00
1,3,5-TRIMETHYLBENZENE	108-67-8	10.00	65.00	135.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	70.00	125.00		40.00
1,3-DICHLOROPROPANE	142-28-9	10.00	75.00	125.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	70.00	125.00		40.00
2,2-DICHLOROPROPANE	594-20-7	10.00	65.00	135.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	160.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: MS						
2-CHLOROTOLUENE	95-49-8	10.00	70.00	130.00		40.00
2-HEXANONE	591-78-6	10.00	45.00	145.00		40.00
4-CHLOROTOLUENE	106-43-4	10.00	75.00	125.00		40.00
4-ISOPROPYLTOLUENE	99-87-6	10.00	75.00	135.00		40.00
4-METHYL-2-PENTANONE	108-10-1	10.00	45.00	145.00		40.00
ACETONE	67-64-1	10.00	20.00	160.00		40.00
ACROLEIN	107-02-8	10.00	70.00	130.00		40.00
ACRYLONITRILE	107-13-1	10.00	70.00	130.00		40.00
BENZENE	71-43-2	10.00	75.00	125.00		40.00
BROMOBENZENE	108-86-1	10.00	65.00	120.00		40.00
BROMOCHLOROMETHANE	74-97-5	10.00	70.00	125.00		40.00
BROMODICHLOROMETHANE	75-27-4	10.00	70.00	130.00		40.00
BROMOFORM	75-25-2	10.00	55.00	135.00		40.00
BROMOMETHANE	74-83-9	10.00	30.00	160.00		40.00
CARBON DISULFIDE	75-15-0	10.00	45.00	160.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	135.00		40.00
CHLOROBENZENE	108-90-7	10.00	75.00	125.00		40.00
CHLOROETHANE	75-00-3	10.00	40.00	155.00		40.00
CHLOROFORM	67-66-3	10.00	70.00	125.00		40.00
CHLOROMETHANE	74-87-3	10.00	50.00	130.00		40.00
CIS-1,2-DICHLOROETHENE	156-59-2	10.00	65.00	125.00		40.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.00	70.00	125.00		40.00
DIBROMOCHLOROMETHANE	124-48-1	10.00	65.00	130.00		40.00
DIBROMOMETHANE	74-95-3	10.00	75.00	130.00		40.00
DICHLORODIFLUOROMETHANE	75-71-8	10.00	35.00	135.00		40.00
ETHYLBENZENE	100-41-4	10.00	75.00	125.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	55.00	140.00		40.00
IODOMETHANE	74-88-4	10.00	70.00	126.00		40.00
ISOPROPYLBENZENE	98-82-8	10.00	75.00	130.00		40.00
m,p-xylene	108-38-3	10.00	80.00	125.00		40.00
METHYL ACETATE	79-20-9	10.00	70.00	130.00		40.00
METHYLENE CHLORIDE	75-09-2	10.00	55.00	140.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix: SO**					
QC Type: MS						
methyl-t-butyl ether	1634-04-4	10.00	75.00	126.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	125.00		40.00
N-BUTYLBENZENE	104-51-8	10.00	65.00	140.00		40.00
N-PROPYLBENZENE	103-65-1	10.00	65.00	135.00		40.00
O-XYLENE	95-47-6	10.00	75.00	125.00		40.00
SEC-BUTYLBENZENE	135-98-8	10.00	65.00	130.00		40.00
STYRENE	100-42-5	10.00	75.00	125.00		40.00
TERT-BUTYL ALCOHOL	75-65-0	10.00	50.00	130.00		40.00
TERT-BUTYLBENZENE	98-06-6	10.00	65.00	130.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	65.00	140.00		40.00
TOLUENE	108-88-3	10.00	70.00	125.00		40.00
TRANS-1,2-DICHLOROETHENE	156-60-5	10.00	65.00	135.00		40.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.00	65.00	125.00		40.00
TRICHLOROETHENE	79-01-6	10.00	75.00	125.00		40.00
TRICHLOROFLUOROMETHANE	75-69-4	10.00	25.00	185.00		40.00
VINYL ACETATE	108-05-4	10.00	65.00	138.00		40.00
VINYL CHLORIDE	75-01-4	10.00	60.00	125.00		40.00
Xylene (Total)	1330-20-7	10.00	83.00	125.00		40.00
QC Type: SURR						
1,2-DICHLOROETHANE-D4	17060-07-0	10.00	65.00	128.00		
BROMOFLUOROBENZENE	30135-88-7	10.00	77.00	111.00		
DIBROMOFLUOROMETHANE	1868-53-7	10.00	65.00	132.00		
TOLUENE-D8	2037-26-5	10.00	85.00	115.00		
Method: 8260B-TCLP	**Matrix: SO**					
QC Type: LCS						
1,1-DICHLOROETHENE	75-35-4	10.00	70.00	130.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	130.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	75.00	125.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	150.00		40.00
BENZENE	71-43-2	10.00	80.00	120.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B-TCLP	**Matrix: SO**					
QC Type: LCS						
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	140.00		40.00
CHLOROBENZENE	108-90-7	10.00	80.00	120.00		40.00
CHLOROFORM	67-66-3	10.00	65.00	135.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	45.00	150.00		40.00
TRICHLOROETHENE	79-01-6	10.00	70.00	125.00		40.00
VINYL CHLORIDE	75-01-4	10.00	50.00	145.00		40.00
QC Type: MS						
1,1-DICHLOROETHENE	75-35-4	10.00	70.00	130.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	130.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	75.00	125.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	150.00		40.00
BENZENE	71-43-2	10.00	80.00	120.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	140.00		40.00
CHLOROBENZENE	108-90-7	10.00	80.00	120.00		40.00
CHLOROFORM	67-66-3	10.00	65.00	135.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	45.00	150.00		40.00
TRICHLOROETHENE	79-01-6	10.00	70.00	125.00		40.00
VINYL CHLORIDE	75-01-4	10.00	50.00	145.00		40.00
QC Type: SURR						
1,2-DICHLOROETHANE-D4	17060-07-0	10.00	70.00	120.00		
BROMOFLUOROBENZENE	30135-88-7	10.00	75.00	120.00		
DIBROMOFLUOROMETHANE	1868-53-7	10.00	85.00	115.00		
TOLUENE-D8	2037-26-5	10.00	85.00	120.00		
Method: 8270C	**Matrix: SO**					
QC Type: LCS						
1,1'-Biphenyl	92-52-4	10.00	50.00	150.00		40.00
1,2,4,5-TETRACHLOROBENZENE	95-94-3	10.00	50.00	150.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	45.00	110.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: LCS						
1,2-DICHLOROBENZENE	95-50-1	10.00	45.00	95.00		40.00
1,2-DIPHENYLHYDRAZINE	122-66-7	10.00	50.00	150.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	40.00	100.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	35.00	105.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	45.00	110.00		40.00
2,4-DICHLOROPHENOL	120-83-2	10.00	45.00	110.00		40.00
2,4-DIMETHYLPHENOL	105-67-9	10.00	30.00	105.00		40.00
2,4-DINITROPHENOL	51-28-5	10.00	15.00	130.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	115.00		40.00
2,6-DINITROTOLUENE	606-20-2	10.00	50.00	110.00		40.00
2-CHLORONAPHTHALENE	91-58-7	10.00	45.00	105.00		40.00
2-CHLOROPHENOL	95-57-8	10.00	45.00	105.00		40.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	10.00	30.00	135.00		40.00
2-METHYLNAPHTHALENE	91-57-6	10.00	45.00	105.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	105.00		40.00
2-NITROANILINE	88-74-4	10.00	45.00	120.00		40.00
2-NITROPHENOL	88-75-5	10.00	40.00	110.00		40.00
3,3'-DICHLOROBENZIDINE	91-94-1	10.00	10.00	130.00		40.00
3-NITROANILINE	99-09-2	10.00	25.00	110.00		40.00
4-BROMOPHENYL PHENYL ETHER	101-55-3	10.00	45.00	115.00		40.00
4-CHLORO-3-METHYLPHENOL	59-50-7	10.00	45.00	115.00		40.00
4-CHLOROANILINE	106-47-8	10.00	10.00	95.00		40.00
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10.00	45.00	110.00		40.00
4-METHYLPHENOL	106-44-5	10.00	50.00	150.00		40.00
4-NITROANILINE	100-01-6	10.00	35.00	115.00		40.00
4-NITROPHENOL	100-02-7	10.00	15.00	140.00		40.00
ACENAPHTHENE	83-32-9	10.00	45.00	110.00		40.00
ACENAPHTHYLENE	208-96-8	10.00	45.00	105.00		40.00
ACETOPHENONE	98-86-2	10.00	50.00	150.00		40.00
ANTHRACENE	120-12-7	10.00	55.00	105.00		40.00
ATRAZINE	1912-24-9	10.00	50.00	150.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: LCS						
Azobenzene	103-33-3	10.00	50.00	150.00		40.00
BENZALDEHYDE	100-52-7	10.00	10.00	118.00		40.00
BENZIDINE	92-87-5	10.00	10.00	150.00		40.00
BENZO(A)ANTHRACENE	56-55-3	10.00	50.00	110.00		40.00
BENZO(A)PYRENE	50-32-8	10.00	50.00	110.00		40.00
BENZO(B)FLUORANTHENE	205-99-2	10.00	45.00	115.00		40.00
BENZO(G,H,I)PERYLENE	191-24-2	10.00	40.00	125.00		40.00
BENZO(K)FLUORANTHENE	207-08-9	10.00	45.00	125.00		40.00
BIS(2-CHLOROETHOXY)METHANE	111-91-1	10.00	45.00	110.00		40.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	10.00	40.00	105.00		40.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	10.00	20.00	115.00		40.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	10.00	45.00	125.00		40.00
BUTYLBENZYL PHTHALATE	85-68-7	10.00	50.00	125.00		40.00
CAPROLACTAM	105-60-2	10.00	50.00	150.00		40.00
CARBAZOLE	86-74-8	10.00	45.00	115.00		40.00
CHRYSENE	218-01-9	10.00	55.00	110.00		40.00
DIBENZ(A,H)ANTHRACENE	53-70-3	10.00	40.00	125.00		40.00
DIBENZOFURAN	132-64-9	10.00	50.00	105.00		40.00
DIETHYL PHTHALATE	84-66-2	10.00	50.00	115.00		40.00
DIMETHYL PHTHALATE	131-11-3	10.00	50.00	110.00		40.00
DI-N-BUTYL PHTHALATE	84-74-2	10.00	55.00	110.00		40.00
DI-N-OCTYL PHTHALATE	117-84-0	10.00	40.00	130.00		40.00
FLUORANTHENE	206-44-0	10.00	55.00	115.00		40.00
FLUORENE	86-73-7	10.00	50.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	45.00	120.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	40.00	115.00		40.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	5.00	8.00	148.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	35.00	110.00		40.00
INDENO(1,2,3-CD)PYRENE	193-39-5	10.00	40.00	120.00		40.00
ISOPHORONE	78-59-1	10.00	45.00	110.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	105.00		40.00
NITROBENZENE	98-95-3	10.00	40.00	115.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: LCS						
N-NITROSODIMETHYLAMINE	62-75-9	10.00	50.00	150.00		40.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	10.00	40.00	115.00		40.00
N-NITROSODIPHENYLAMINE	86-30-6	10.00	50.00	115.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	25.00	120.00		40.00
PHENANTHRENE	85-01-8	10.00	50.00	110.00		40.00
PHENOL	108-95-2	10.00	40.00	100.00		40.00
PYRENE	129-00-0	10.00	45.00	125.00		40.00
QC Type: MS						
1,1'-Biphenyl	92-52-4	10.00	50.00	150.00		40.00
1,2,4,5-TETRACHLOROBENZENE	95-94-3	10.00	50.00	150.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	45.00	110.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	45.00	95.00		40.00
1,2-DIPHENYLHYDRAZINE	122-66-7	10.00	50.00	150.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	40.00	100.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	35.00	105.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	45.00	110.00		40.00
2,4-DICHLOROPHENOL	120-83-2	10.00	45.00	110.00		40.00
2,4-DIMETHYLPHENOL	105-67-9	10.00	30.00	105.00		40.00
2,4-DINITROPHENOL	51-28-5	10.00	15.00	130.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	115.00		40.00
2,6-DINITROTOLUENE	606-20-2	10.00	50.00	110.00		40.00
2-CHLORONAPHTHALENE	91-58-7	10.00	45.00	105.00		40.00
2-CHLOROPHENOL	95-57-8	10.00	45.00	105.00		40.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	10.00	30.00	135.00		40.00
2-METHYLNAPHTHALENE	91-57-6	10.00	45.00	105.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	105.00		40.00
2-NITROANILINE	88-74-4	10.00	45.00	120.00		40.00
2-NITROPHENOL	88-75-5	10.00	40.00	110.00		40.00
3,3'-DICHLOROBENZIDINE	91-94-1	10.00	10.00	130.00		40.00
3-NITROANILINE	99-09-2	10.00	25.00	110.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: MS						
4-BROMOPHENYL PHENYL ETHER	101-55-3	10.00	45.00	115.00		40.00
4-CHLORO-3-METHYLPHENOL	59-50-7	10.00	45.00	115.00		40.00
4-CHLOROANILINE	106-47-8	10.00	10.00	95.00		40.00
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	10.00	45.00	110.00		40.00
4-METHYLPHENOL	106-44-5	10.00	50.00	150.00		40.00
4-NITROANILINE	100-01-6	10.00	35.00	115.00		40.00
4-NITROPHENOL	100-02-7	10.00	15.00	140.00		40.00
ACENAPHTHENE	83-32-9	10.00	45.00	110.00		40.00
ACENAPHTHYLENE	208-96-8	10.00	45.00	105.00		40.00
ACETOPHENONE	98-86-2	10.00	50.00	150.00		40.00
ANTHRACENE	120-12-7	10.00	55.00	105.00		40.00
ATRAZINE	1912-24-9	10.00	50.00	150.00		40.00
Azobenzene	103-33-3	10.00	50.00	150.00		40.00
BENZALDEHYDE	100-52-7	10.00	10.00	118.00		40.00
BENZIDINE	92-87-5	10.00	10.00	150.00		40.00
BENZO(A)ANTHRACENE	56-55-3	10.00	50.00	110.00		40.00
BENZO(A)PYRENE	50-32-8	10.00	50.00	110.00		40.00
BENZO(B)FLUORANTHENE	205-99-2	10.00	45.00	115.00		40.00
BENZO(G,H,I)PERYLENE	191-24-2	10.00	40.00	125.00		40.00
BENZO(K)FLUORANTHENE	207-08-9	10.00	45.00	125.00		40.00
BIS(2-CHLOROETHOXY)METHANE	111-91-1	10.00	45.00	110.00		40.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	10.00	40.00	105.00		40.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	10.00	20.00	115.00		40.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	10.00	45.00	125.00		40.00
BUTYLBENZYL PHTHALATE	85-68-7	10.00	50.00	125.00		40.00
CAPROLACTAM	105-60-2	10.00	50.00	150.00		40.00
CARBAZOLE	86-74-8	10.00	45.00	115.00		40.00
CHRYSENE	218-01-9	10.00	55.00	110.00		40.00
DIBENZ(A,H)ANTHRACENE	53-70-3	10.00	40.00	125.00		40.00
DIBENZOFURAN	132-64-9	10.00	50.00	105.00		40.00
DIETHYL PHTHALATE	84-66-2	10.00	50.00	115.00		40.00
DIMETHYL PHTHALATE	131-11-3	10.00	50.00	110.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: MS						
DI-N-BUTYL PHTHALATE	84-74-2	10.00	55.00	110.00		40.00
DI-N-OCTYL PHTHALATE	117-84-0	10.00	40.00	130.00		40.00
FLUORANTHENE	206-44-0	10.00	55.00	115.00		40.00
FLUORENE	86-73-7	10.00	50.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	45.00	120.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	40.00	115.00		40.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	5.00	8.00	148.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	35.00	110.00		40.00
INDENO(1,2,3-CD)PYRENE	193-39-5	10.00	40.00	120.00		40.00
ISOPHORONE	78-59-1	10.00	45.00	110.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	105.00		40.00
NITROBENZENE	98-95-3	10.00	40.00	115.00		40.00
N-NITROSODIMETHYLAMINE	62-75-9	10.00	50.00	150.00		40.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	10.00	40.00	115.00		40.00
N-NITROSODIPHENYLAMINE	86-30-6	10.00	50.00	115.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	25.00	120.00		40.00
PHENANTHRENE	85-01-8	10.00	50.00	110.00		40.00
PHENOL	108-95-2	10.00	40.00	100.00		40.00
PYRENE	129-00-0	10.00	45.00	125.00		40.00
QC Type: SURR						
2,4,6-TRIBROMOPHENOL	118-79-6	10.00	35.00	125.00		
2-FLUOROBIPHENYL	321-60-8	10.00	45.00	105.00		
2-FLUOROPHENOL	367-12-4	10.00	35.00	105.00		
NITROBENZENE-D5	20810-28-0	10.00	35.00	100.00		
PHENOL-D5	4165-62-2	10.00	40.00	100.00		
TERPHENYL-D14	98904-43-9	10.00	30.00	125.00		
Method: 8270C-TCLP	**Matrix: SO**					
QC Type: LCS						
1,4-DICHLOROBENZENE	106-46-7	10.00	30.00	100.00		
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C-TCLP	**Matrix: SO**					
QC Type: LCS						
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	50.00	115.00		
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	120.00		
2-METHYLPHENOL	95-48-7	10.00	40.00	110.00		
3&4-Methylphenol	106-44-5	10.00	30.00	110.00		
HEXACHLOROBENZENE	118-74-1	10.00	50.00	110.00		
HEXACHLOROBUTADIENE	87-68-3	10.00	25.00	105.00		
HEXACHLOROETHANE	67-72-1	10.00	30.00	95.00		
NITROBENZENE	98-95-3	10.00	45.00	110.00		
PENTACHLOROPHENOL	87-86-5	10.00	40.00	115.00		
PYRIDINE	110-86-1	10.00	10.00	106.00		
QC Type: MS						
1,4-DICHLOROBENZENE	106-46-7	10.00	30.00	100.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	50.00	115.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	120.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	110.00		40.00
3&4-Methylphenol	106-44-5	10.00	30.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	50.00	110.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	25.00	105.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	30.00	95.00		40.00
NITROBENZENE	98-95-3	10.00	45.00	110.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	40.00	115.00		40.00
PYRIDINE	110-86-1	10.00	10.00	106.00		40.00
QC Type: SURR						
2,4,6-TRIBROMOPHENOL	118-79-6	10.00	40.00	125.00		
2-FLUOROBIPHENYL	321-60-8	10.00	50.00	110.00		
2-FLUOROPHENOL	367-12-4	10.00	20.00	110.00		
NITROBENZENE-D5	20810-28-0	10.00	40.00	110.00		
PHENOL-D5	4165-62-2	10.00	10.00	115.00		
TERPHENYL-D14	98904-43-9	10.00	50.00	135.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 9012	**Matrix: SO**					
QC Type: LCS						
CYANIDE	57-12-5	10.00	80.00	120.00		
QC Type: MS						
CYANIDE	57-12-5	10.00	75.00	125.00		
Method: DOE 4.5.2.3	**Matrix: SO**					
QC Type: LCS						
Ac-228	14331-83-0	104.00	104.00	130.00		3.92
Bi-212	14913-49-6	57.00	57.00	90.00		3.92
Bi-214	14733-03-0	96.00	96.00	120.00		3.92
K-40	13966-00-2	102.00	102.00	118.00		3.92
Pb-212	15092-94-1	107.00	107.00	128.00		3.92
Pb-214	15067-28-4	99.00	99.00	127.00		3.92
Ra-226	13982-63-3	65.00	65.00	106.00		3.92
Ra-228	15262-20-1	104.00	104.00	130.00		3.92
Th-234	15065-10-8	13.00	13.00	370.00		3.92
Method: EPA 1010	**Matrix: SO**					
QC Type: LCS						
IGNITABILITY	10-36-6	50.00	80.00	120.00		25.00
Method: SM 4500-NH3 D	**Matrix: AQ**					
QC Type: LCS						
AMMONIA AS N	7664-41-7	10.00	80.00	120.00		20.00
QC Type: MS						
AMMONIA AS N	7664-41-7	10.00	80.00	120.00		20.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: SM 5220D	**Matrix: AQ**					
QC Type: LCS						
CHEMICAL OXYGEN DEMAND	COD	10.00	80.00	120.00		20.00
QC Type: MS						
CHEMICAL OXYGEN DEMAND	COD	10.00	80.00	120.00		20.00
Method: SW846_7.3.1	**Matrix: SO**					
QC Type: LCS						
Reactive Cyanide	57-12-5	0.00	0.00	12.40		20.00
QC Type: MS						
Reactive Cyanide	57-12-5	0.00	0.00	12.40		20.00
Method: SW846_7.3.2	**Matrix: SO**					
QC Type: LCS						
Reactive Sulfide	18496-25-8	10.00	22.60	114.00		20.00
QC Type: MS						
Reactive Sulfide	18496-25-8	10.00	22.60	114.00		20.00

APPENDIX 5

STANDARD SAMPLE TRACKING AND DOCUMENTATION FORMS, REVIEW FORMS AND CHECKLISTS

SAMPLE IDENTIFICATION LABEL

I-CHEM

CLIENT/SOURCE	☐ GRAB ☐ COMPOSITE OTHER:
SITE NAME	DATE
SAMPLE #	TIME
ANALYSIS	PRESERVATIVE
	COLL. BY

CHAIN-OF-CUSTODY FORM

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME						PARAMETERS									INDUSTRIAL HYGIENE SAMPLE	Y / N
SAMPLERS: *(Signature)*					(Printed)												
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS										REMARKS	

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
(Printed)		(Printed)	(Printed)		(Printed)
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks	
(Printed)		(Printed)			

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Preparatory Phase Checklist

Contract:	Date Preparatory Held:
Spec. Section & Paragraph:	Definable Feature of Work:
Drawing Sheet Numbers:	Major Definable Feature:

A. Personnel Present

Name	Position	Company

B. Has each spec. paragraph, drawing, and shop drawing detail been studied? Yes ___ No ___

C. Transmittals Involved

Number and Item	Code	Contractor/Government Approval

Have all items involved been approved? Yes _____ No_____

D. Are all materials on-hand? Yes ____ No_____

Are the materials on the job-site to be incorporated the same as those approved?
Yes _____ No _____

Have all materials been checked for contract compliance against approved shop drawings? Yes ____ No _____

Equipment to be used in executing the work:

Items not on-hand or not in compliance with transmittals:

E. Tests required in accordance with contract requirements:

Test	Paragraph

F. Accident Prevention Planning - Hazard Control Measures:

Activity Hazard Analysis

Activity	Hazard(s)	Controls

Operational Equipment Checklist

Attached For:

On File For:

G. Have procedures for accomplishing work been reviewed with appropriate people?

Yes ___ No

Scope of Work/Method of Construction:

Safety Issues:

Spill Prevention Issues:

H. Has all preliminary work been accomplished in accord with contract requirements and is this segment of work ready to start? Yes ___ No

Explain any problems:

I. Remarks:

USACE Comments:

Sevenson Comments:

CQC Systems Manager	Project Engineer

Initial/Follow-Up Phase Inspection Checklist

Inspection Type: ☐ Initial Phase ☐ Follow-Up Phase

Date: _____ Specifications Paragraph: _____

Description and location of work inspected: _____

_____

Reference contract drawings: _____

A. Personnel Present

Name	Position	Company

B. Materials being used are in strict compliance with the Contract Plans and Specifications?
YES _____ NO _____
If not, explain: _____

_____

C. Procedures and/or work methods witnessed are in strict compliance with the requirements of the Contract Specifications? YES _____ NO _____
If not, explain: _____

_____

D. Workmanship is acceptable? YES _____ NO _____
State areas where improvement is needed: _____

_____

E. Safety violations and corrective actions taken: _____

_____

F. Remarks: _____

_____

_____

_____ _____

Quality Control Representative Project Engineer

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: _____

Job Identification and Site Numbers: _____

_____

Weather: _____

_____

Subcontractors Present Onsite: _____

_____

Health and Safety Measures Necessary for Planned Activities: _____

_____

Health and Safety Violations and Corrective Actions: _____

_____

_____

Planned Daily Activities: _____

_____

_____

Description of Chemical Data Acquisition Work Performed: _____

_____

_____

Sample Shipments and Problems Regarding Sampling and Sample Shipments: _____

_____

Chemical Parameter Measurement Problems: _____

_____

_____

Contingency Sampling: _____

_____

_____

Non-conformance Problems: _____

_____

_____

Corrective Actions (including approvals): _____

_____

_____

Initials of Personnel Performing Corrective Actions: _____

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): _____

_____

_____

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

_____ _____

Signature Date

SITE QC INSPECTION REPORT

Project Name _____ Client/Generator _____

Sevenson Job # _____ Contract # _____

Project Location _____ Task Order # _____

Inspection Date _____ Inspection Time _____

Inspected By _____

Sevenson Project Manager _____ Client/Generator Project Manager _____

Site Telephone # _____ Contact Telephone # _____

Site Facsimile # _____ Contact Facsimile # _____

Site Email Address _____

Site Plans/Activities

Construction Management Plan/Work Plan

Original Approval Date _____

Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Current Plan Copy Available Onsite
☐	☐	Spill Response equipment/materials available?
☐	☐	Soil erosion/sediment controls in-place?
☐	☐	Work zones (EZ, CRZ, SZ) clearly delineated?
☐	☐	All equipment inspections being documents (in and out)?

COMMENTS: _____

_____

_____

_____

_____

Health and Safety

Original Plan Approval Date _____
Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Current Plan Copy Available Onsite
☐	☐	Activity Hazard Analysis Complete and Updated
☐	☐	Daily Safety Meetings Conducted and Documented
☐	☐	Emergency Response Information Posted
☐	☐	Medical and Training Documentation Current
☐	☐	Daily Safety Logs Completed
☐	☐	Chemical Inventory Updated
☐	☐	Inspections Completed and Documented
☐	☐	Map to hospital prominently displayed?
☐	☐	Is work being conducted safely?

COMMENTS: _____

_____

_____

Sampling and Analysis

Original Plan Approval Date _____
Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Is a current plan copy available onsite?
☐	☐	Has a review of the Plan and all relevant SOPs with all site sampling been conducted?
☐	☐	Are field logbooks and other site documentation maintained properly and in a secure area?
☐	☐	Are Preparatory Inspections being conducted prior to each sampling event?
☐	☐	Are Initial and Follow-up Inspections being conducted for each sampling event?
☐	☐	Is the site Sampling Manager performing periodic field audits of all sampling activities?
☐	☐	Is field documentation being reviewed by the site Sampling Manager prior to the completion of each days' sampling events?
☐	☐	Is the Sampling Manager performing field audits of sample labeling, chain-of-custody, packing and shipping activities?
☐	☐	Are Daily Chemical Quality Control Reports (DCQCR) being completed each day and properly?
☐	☐	Are DCQCR, instrument maintenance and calibration, nonconformance/corrective action reports and sampling logs current?

COMMENTS: _____

_____

_____

Project Work Tasks	Sevenson Checklist #
(Check all that apply and attach completed QC Report)	
☐ Monitoring Well Installation, Development, and/or Abandonment	SES 001
☐ Groundwater Monitoring Well Sampling	SES 002
☐ Surface Water Sampling	SES 003
☐ Subsurface Soil Sampling	SES 004
☐ Drum/Tank Sampling	SES 005
☐ Mobile Laboratory	SES 006
☐ Packing, Storing, and Shipment of Samples	SES 007
☐ Field Documentation	SES 008
☐ Decontamination	SES 009
☐ Sample Cooler Shipment	SES 010
☐ Onsite Waste Storage	SES 011
☐ Offsite waste Transport/Disposal	SES 012

COMMENTS: _____

_____

_____

_____

Sevenson Project Manager _____

Name Signature Date

QC Reviewer _____

Name Signature Date

CQC Systems Manager _____

Name Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?				
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?				
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?				
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?				
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?				
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?				
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?				
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?				
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?				
Was a shipping label attached to the cooler?				
Were COCs and shipping tracking labels faxed to lab?				

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?			
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?			
◦ Field Sampling Forms			
◦ Chain of Custody Forms			
◦ Field Log Books			
◦ Field Change Request Forms			
◦ Additional Forms (list below)			
Was field documentation forwarded to Sevenson office for peer/QC review?			
Were deficiencies reported to the Field Sampling Manager?			

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Decontamination
Sevenson Checklist #009

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Was all sampling equipment decontaminated properly prior to use and between sample intervals?				
Was each decontamination event recorded in the logbook?				
Was investigation derived waste (IDW) (e.g., decontamination water, personal protective equipment (PPE), etc.) handled properly?				
Were the location, type, number and source of containers of IDW recorded in the logbook?				
Was Sevenson Technical Services notified if IDW requires offsite disposal?				

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: _____

Inspection Date: _____

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☐	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☐	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☐	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☐	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☐	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☐	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☐	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☐	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☐	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☐	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☐	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☐	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☐	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☐	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☐	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☐	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☐	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☐	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☐	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

_____

_____

_____

Sevenson Project Manager _____

Name Signature Date

QC Reviewer _____

Name Signature Date

CQC Systems Manager _____

Name Signature Date

Field Change Request Form

PROJECT MANAGER:_____
PROJECT:_____
JOB NUMBER:_____
CONTRACT NUMBER:_____
DATE:_____
FIELD CHANGE REQUEST NUMBER:_____

Weather

	Bright Sun	Clear	Overcast	Rain	Snow
Temp	To 32	32-50	50-70	70-85	85 up
Wind	Calm	Moderate	High		
Humidity	Dry	Moderate	Humid		

SUB-CONTRACTORS ON SITE:

EQUIPMENT ON SITE:

SAMPLING PERFORMED:

NON-CONFORMANCE/PROBLEM ITEM(S):

PROJECT QA/QC OFFICER NOTIFIED:	TIME	DATE	INITIALS
PROJECT MANAGER NOTIFIED:	TIME	DATE	INITIALS
CONTRACTING OFFICER NOTIFIED:	TIME	DATE	INITIALS
PROJECT TECHNICAL DIRECTOR NOTIFIED:	TIME	DATE	INITIALS

WORK STOPPED? _____ YES _____ NO

IF NOT, EXPLAIN

Sheet _____ of _____

PROJECT _____ REPORT NO. _____

JOB NO. _____ DATE _____

ACTION TO BE TAKEN:

HEALTH AND SAFETY LEVEL CHANGES: _____No _____ Yes (explain)

HSO NAME/DATE:

PROBLEM RESOLUTION:

SPECIAL NOTES:

FOLLOW-UP TO BE FILED? _____ No _____ Yes (explain/attach)

FIELD CHANGE APPROVED: _____ No _____ Yes Initials: _____

Sheet _____ of _____

BY: _____ TITLE:

NON-CONFORMANCE/QUALITY CONTROL REPORT

Date: _____

Organization Name: _____

Initiator's Name and Title: _____

Problem Description:

_____
_____
_____
_____
_____
_____
_____

Reported To: _____

Corrective Action:

_____
_____
_____
_____
_____
_____
_____

Reviewed and Implemented by: _____

QUALITY ASSURANCE PROJECT PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
OPERABLE UNIT 1 – SOIL REMEDIATION
SOUTH PLAINFIELD, NEW JERSEY

Prepared by:
Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Based on the Intergovernmental Data Quality Task Force
Uniform Federal Policy for Quality Assurance Project Plans
(Final Version 1, March 2005)

Revision 1: July 10, 2012

Page intentionally left blank

TABLE OF CONTENTS

Introduction 5
QAPP Worksheet #1. Title and Approval Page 8
QAPP Worksheet #2. QAPP Identifying Information 9
QAPP Worksheet #3. Distribution List 14
QAPP Worksheet #4. Project Personnel Sign-Off Sheet 15
QAPP Worksheet #5. Project Organizational Chart 18
QAPP Worksheet #6. Communication Pathways 21
QAPP Worksheet #7. Personnel Responsibilities and Qualifications Table 23
QAPP Worksheet #8. Special Personnel Training Requirements Table 24
QAPP Worksheet #9. Project Scoping Session Participants Sheet 25
QAPP Worksheet #10. Problem Definition 26
QAPP Worksheet #11. Project Quality Objectives/Systematic Planning Process Statements 28
QAPP Worksheet #12. Measurement Performance Criteria Table 30
QAPP Worksheet #13. Secondary Data Criteria and Limitations Table 47
QAPP Worksheet #14. Summary of Project Tasks 48
QAPP Worksheet #15. Reference Limits and Evaluation Table 50
QAPP Worksheet #16. Project Schedule/Timeline Table 67
QAPP Worksheet #17. Sampling Design and Rationale 68
QAPP Worksheet #18. Sampling Locations and Methods/SOP Requirements Table 73
QAPP Worksheet #19. Analytical SOP Requirements Table 75
QAPP Worksheet #20. Field Quality Control Sample Summary Table 78
QAPP Worksheet #21. Project Sampling SOP Reference Table 80
QAPP Worksheet #22. Field Equipment Calibration, Maintenance, Testing, and Inspection Table 81
QAPP Worksheet #23. Analytical SOP Reference Table 82
QAPP Worksheet #24. Analytical Instrument Calibration Table 84
QAPP Worksheet #25. Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table 93
QAPP Worksheet #26. Sample Handling System 96
QAPP Worksheet #27. Sample Custody Requirements 97
QAPP Worksheet #28. QC Samples Table 101
QAPP Worksheet #29. Project Documents and Records Table 121
QAPP Worksheet #30. Analytical Services Table 122
QAPP Worksheet #31. Planned Project Assessment Table 124
QAPP Worksheet #32. Assessment Findings and Response Actions 125
QAPP Worksheet #33. QA Management Reports Table 126
QAPP Worksheet #34. Sampling and Analysis Verification (Step I) Process Table 127
QAPP Worksheet #35. Sampling and Analysis Validation (Steps IIa and IIb) Process Table 128
QAPP Worksheet #36. Sampling and Analysis Validation (Steps IIa and IIb) Summary Table 129
QAPP Worksheet #37. Data Usability Assessment 131

LIST OF ATTACMENTS AND APPENDICES

Appendix 1 – Figures
- Site Location Map
- Key Map
- Property 108, 129, 301, and 303 Excavation Plan
- Property 116 and 302 Excavation Plan
- Property 128, 304, and 305 Excavation Plan

Appendix 2 – Data Needs Table
Appendix 3 – Data Quality Objectives
Appendix 4 – Measurement Performance Critiera
Appendix 5 – Standard Sample Tracking and Documentation Forms, Review Forms, and Checklists
- Sample Identification Label
- Chain of Custody Form
- Preparatory Phase Checklist
- Initial/Follow-Up Phase Inspection Checklist
- Daily Chemical Quality Control Report
- Site QC Inspection Report
- Task Specific QC Checklist – Work Task: Packing, Storing, and Shipment of Samples
- Task Specific QC Checklist – Work Task: Field Documentation
- Task Specific QC Checklist – Work Task: Decontamination
- Task Specific QC Checklist – Work Task: Sample Cooler Shipment
- Field Change Request Form
- Non-Conformance/Quality Control Report

LIST OF ABBREVIATIONS AND ACRONYMS

ADR	Automated Data Review
ANSETS	Analytical Services Tracking System
AOC	Administrative Order of Consent
ATSDR	Agency for Toxic Substances and Disease Registry
BFB	Bromofluorobenzene
bgs	Below Ground Surface
CA	Corrective Action
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CHMM	Certified Hazardous Materials Manager
CIH	Certified Industrial Hygienist
COC	Chain of Custody
COD	Chemical Oxygen Demand
COR	Contracting Officer Representative
CQCSM	Contractor Quality Control Systems Manager
CVAA	Cold Vapor Atomic Absorption
DFTPP	Decachlorotriphenylphosphine
DOD	Department of Defense
DQI	Data Quality Indicator
DQO	Data Quality Objective
DSC	D.S.C. of Newark Enterprises, Inc.
EDD	Electronic Data Deliverable
EDMS	Environmental Data Management System
ELAP	Environmental Laboratory Accreditation Program
FASTAC	Field and Analytical Services Teaming Advisory Committee
FWHM	Full Width at Half Maximum
GC-ECD	Gas Chromatography with Electron Capture Detector
GC/MS	Gas Chromatography/Mass Spectroscopy
ICB	Initial Calibration Blank
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectrometry
ICS	Interference Check Sample
ICV	Initial Calibration Verification
KCD	Kansas City District
LCS	Laboratory Control Sample
LIMS	Laboratory Information Management System
LOD	Limit of Detection
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MPC	Measurement Performance Criteria
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NAD	Normalized Absolute Difference
NJDEP	New Jersey Department of Environmental Protection
NORM	Naturally Occurring Radioactive Material
NPL	National Priorities List
NYD	New York District
OSHA	Occupational Safety and Health Administration
OU-1	Operable Unit 1
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PM	Project Manager
ppm	Parts Per Million
PQL	Practical Quantitation Limit

PRAC	Pre-Placed Remedial Action Contract
QA	Quality Assurance
QC	Quality Control
QCSR	Quality Control Summary Report
QL	Quantitation Limit
QSM	Quality Systems Manual
RCRA	Resource Conservation and Recovery Act
RDCSRS	Residential Direct Contact Soil Remediation Standards
REM	Registered Environmental Manager
RL	Reporting Limit
ROD	Record of Decision
RPD	Relative Percent Difference
RPM	Remedial Project Manager
RRF	Relative Response Factor
RSD	Relative Standard Deviation
Sevenson	Sevenson Environmental Services, Inc.
SOP	Standard Operating Procedure
Spectrum	Spectrum Analytical, Inc.
SSHERP	Site Safety, Health, and Emergency Response Plan
SSHO	Site Safety and Health Officer
SVOC	Semi-Volatile Organic Compound
TBD	To Be Determined
TCLP	Toxicity Characteristic Leachate Procedure
TSCA	Toxic Substance Control Act
UFP- QAPP	Uniform Federal Policy - Quality Assurance Project Plan
UPS	United Parcel Service
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
yd^3	Cubic Yard

INTRODUCTION

Project Background

The Cornell-Dubilier Electronics Superfund Site (the site) is located at 333 Hamilton Boulevard in South Plainfield, Middlesex County, New Jersey. A site location map is included in Appendix 1. The United States Environmental Protection Agency (USEPA) assigned identification number NJD981557879 to the site.

The site consists of approximately 26 acres including the Hamilton Industrial Park, contaminated portions of the Bound Brook adjacent to and downstream of the industrial park, and contaminated residential, municipal, and commercial properties in the vicinity of the former Cornell-Dubilier Electronics Corporation, Inc. facility. Former buildings on the site have been demolished and their footprints covered with temporary asphalt pavement. The only remaining building at the site is a water tower. The site is bounded by the Lehigh Valley Railroad, Perth Amboy Branch (presently Conrail) to the northeast, the South Plainfield Department of Public Works property to the southeast, by single-family residential properties across Spicer Avenue to the southwest, and by mixed residential and commercial properties across Hamilton Boulevard to the northwest. The area is a busy, heavily developed, mixed-use neighborhood.

The site remediation was separated into multiple Operable Units. The scope of the current remedial action is Operable Unit 1 (OU-1), specifically remediation of residential, commercial, and municipal properties in the vicinity of the former Cornell-Dubilier Electronics facility. The response action selected in the Record of Decision (ROD) dated September 2003 for OU-1 soils includes:

- Excavation of contaminated soil containing polychlorinated biphenyls (PCBs) from properties, backfilling with clean fill, and property restoration as necessary.
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary.
- Indoor dust remediation where PCB-contaminated dust is encountered.
- Where necessary, temporary relocation of residents during the indoor remediation.

The purpose of this Uniform Federal Policy – Quality Assurance Project Plan (UFP-QAPP) is to provide procedures for the collection, analysis, and evaluation of data for the OU-1 soils in accordance with the response action selected in the ROD. No work will be conducted under the current contract with regards to the indoor dust remediation.

Site History and Contaminants

Cornell-Dubilier Electronics manufactured electronic parts and components, including capacitors, from 1936 to 1962. PCBs and chlorinated organic degreasing solvents were used in the manufacturing process. It is alleged that during the period of operation, Cornell-Dubilier Electronics dumped PCB-contaminated materials and other hazardous substances directly onto site soils. A former employee has claimed that the rear of the property was saturated with transformer oils and that capacitors were also buried behind the facility during the same time period (Foster Wheeler, 2002). Based on historic site practices, portions of the site have the potential to be contaminated with volatile organic compounds (VOCs; primarily trichloroethene and dechlorination products), PCBs, dioxins, metals (primarily mercury and lead), and other constituents of potential concern. Historical site data pertaining to OU-1 are summarized in the documents included in Worksheet #13 of this UFP-QAPP.

State and Federal Response Actions

In June 1994, at the request of the New Jersey Department of Environmental Protection (NJDEP), USEPA collected and analyzed soil, surface water, and sediments at the facility. The results of the sample analyses revealed that elevated levels of PCBs, VOCs, and inorganic chemicals were present at the site.

In February, June, and July 1996, USEPA collected and analyzed additional soil samples at the facility. The results confirmed the presence of elevated levels of PCBs, and also identified the presence of lead.

As a result of the contamination found at the facility, in March 1997, USEPA ordered the owner of the facility property, D.S.C. of Newark Enterprises, Inc., (DSC) to perform a removal action to mitigate risks associated with contaminated soil and surface water runoff from the facility. The removal action included paving driveways and parking areas in the industrial park, installing a security fence, and implementing drainage controls.

In 1997, USEPA conducted a preliminary investigation of the Bound Brook to evaluate the potential impacts of contamination on human health and the environment. Elevated levels of PCBs were found in fish and sediments of the Bound Brook. As a result of these investigations, NJDEP issued a fish consumption advisory for Bound Brook and its tributaries, including New Market Pond and Spring Lake.

In October and November 1997, USEPA collected soil and indoor dust samples from residential properties on Spicer Avenue, near the facility property. USEPA and the Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the data obtained from this sampling and concluded that exposure to dust and soil posed a potential health concern for residents at several of the properties tested. To limit the potential for exposure to PCBs until a final remedy could be selected, USEPA initiated another removal action to clean the interiors of seven homes on Spicer Avenue, Garibaldi Avenue, and Hamilton Boulevard. USEPA performed interior cleaning on seven properties and entered into an administrative order of consent (AOC) with DSC and Cornell-Dubilier Electronics for removal of contaminated soil from six properties. Interior dust remediation was completed in April 1998, and removal of PCB-contaminated soil was completed in September 1999.

In 1998, USEPA expanded its investigation to Delmore Avenue and Hamilton Boulevard near the industrial park. Again, USEPA determined that PCBs found in dust and soil posed a potential health concern for residents. USEPA cleaned the interiors of eight homes on Delmore Avenue and Hamilton Boulevard, and entered into another AOC for removal of contaminated soil from seven properties. These removal actions were completed in January 2000, further limiting the potential for exposure until a final remedy could be selected.

In July 1998, USEPA included the site on the National Priorities List (NPL).

Site Specific Definition of the Problem

A complete description of the problem definition is included in Worksheet #10 of this UFP-QAPP. Work is being conducted at properties located in the vicinity of the former Cornell-Dubilier Electronics facility due to contamination found in soil associated with past industrial operations conducted at the site. A remedial design for OU-1 soil has been completed, and the work included the sampling and analysis required to define the extent of the excavations to be performed under this UFP-QAPP. Sevenson will be responsible for removal of contaminated soil based upon the predetermined limits of excavation; backfilling of excavations with offsite materials; transportation of all soil and debris to an offsite disposal

facility; site restoration and implementation of appropriate site controls; and other activities necessary for complete and proper remediation of the site.

QAPP Worksheet #1
Title and Approval Page

Site Name/Project Name: Cornell-Dubilier Electronics Superfund Site

Site Location: South Plainfield, New Jersey

Document Title: Uniform Federal Policy – Quality Assurance Project Plan for Cornell-Dubilier Electronics Superfund Site, Operable Unit 1 - Soil Remediation

Lead Organization: United States Army Corps of Engineers (USACE) – Kansas City District (KCD), USACE – New York District (NYD), and USEPA Region II

Preparer's Name and Organizational Affiliation: Jennifer Singer, Sevenson Environmental Services, Inc. (Sevenson)

Preparer's Address, Telephone Number, and E-mail Address: 2749 Lockport Road, Niagara Falls, New York 14305; (716) 284-0431; jsinger@sevenson.com

Preparation Date: Revision 1: July 10, 2012

Contractor's Project Manager: 10 July 12
Signature, Date
Kim Lickfield, Sevenson Environmental Services, Inc.

Contractor's Project QA Officer: 7-10-12
Signature, Date
William Zambrana, Sevenson Environmental Services, Inc.

Lead Organization's Project Manager: _____
Signature, Date
Ken Mass, USACE

Approval Signatures: _____
Signature, Date
Diego Garcia, USEPA

Other Approval Signatures: _____
Signature, Date
Patrick Nejand, USACE COR

_____
Signature, Date

_____
Printed Name/Title/Organization

QAPP Worksheet #2
QAPP Identifying Information

Site Name/Project Name: Cornell-Dubilier Electronics Superfund Site

Site Location: South Plainfield, New Jersey

Site Number/Code: NJD981557879

Operable Unit: OU1 – Soil Remediation

Contractor Name: Sevenson Environmental Services, Inc.

Contractor Number: W912DQ-10-D-3006

Contract Title: Large Business Remediation Services Pre-Placed Remedial Action Contract (PRAC)

Work Assignment Number: Task Order #0002

1. Identify guidance used to prepare QAPP:
Uniform Federal Policy for Quality Assurance Project Plans, Final Version 1, March 2005
Guidance on Systematic Planning Using the Data Quality Objective Process, EPA QA/G-4, EPA/240/B-06/006, February 2006

2. Identify regulatory program:
USEPA Region II, Superfund

3. Identify approval entity:
USEPA Region II, USACE-KCD, USACE-NYD

4. Indicate whether the QAPP is a generic or a project-specific QAPP.

5. List dates of scoping sessions that were held: May 2012

6. List dates and titles of QAPP documents written for previous site work, if applicable:
Quality Assurance Project Plan – Final Soils (Malcolm Pirnie, Inc., August 2006)
Quality Assurance Project Plan – OU2, Cluster 12 (Sevenson, November 2006)
Quality Assurance Project Plan – OU2, Cluster 12, Revision 1 (Sevenson, December 2006)
Quality Assurance Project Plan – OU2, Cluster 12, Revision 2 (Sevenson, December 2006)
UFP-QAPP – OU-2, Building Demolition (Sevenson, April 2007)
UFP-QAPP – OU-2, Building Demolition, Addendum 1, Capacitor Disposal Area, Revision 3 (Sevenson, October 2007)
UFP-QAPP – OU1 Vicinity Property Pre-Design Sampling (Malcolm Pirnie, Inc., March 2008)
UFP-QAPP – OU-2, Soil Remediation, Revision 3 (Sevenson, April 2009)
UFP-QAPP – OU-2, Soil Remediation, Addendum 1, Temporary Water Treatment Facility, Revision 1 (Sevenson, November 2009)
UFP-QAPP – OU2, Soil Remediation, Addendum 2, Low-Temperature Thermal Desorption Operational Samples (Sevenson, March 2011)

7. List organizational partners (stakeholders) and connection with lead organization:
The project organizational partners include representatives from USEPA Region II, USACE-KCD, USACE-NYD, and Sevenson. The USEPA and USACE will provide project and contract management guidance to Sevenson. Sevenson will be the primary contractor and will be responsible for developing and implementing the remedial action and will provide project management to any other subcontractors.

8. List data users:
USEPA Region II, USACE-KCD, USACE-NYD, NJDEP, Sevenson

9. If any required QAPP elements and required information are not applicable to the project, then circle the omitted QAPP elements and required information on the attached table. Provide an explanation for their exclusion below:
No required QAPP elements were omitted.

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
Project Management and Objectives		
2.1 Title and Approval Page	1	- Title and Approval Page
2.2 Document Format and Table of Contents 2.2.1 Document Control Format 2.2.2 Document Control Numbering System 2.2.3 Table of Contents 2.2.4 QAPP Identifying Information	2	- Table of Contents - QAPP Identifying Information
2.3 Distribution List and Project Personnel Sign-Off Sheet 2.3.1 Distribution List 2.3.2 Project Personnel Sign-Off Sheet	3 4	- Distribution List - Project Personnel Sign-Off Sheet
2.4 Project Organization 2.4.1 Project Organizational Chart 2.4.2 Communication Pathways 2.4.3 Personnel Responsibilities and Qualifications 2.4.4 Special Training Requirements and Certification	5 6 7 8	- Project Organizational Chart - Communication Pathways - Personnel Responsibilities and Qualifications Table - Special Personnel Training Requirements Table
2.5 Project Planning/Problem Definition 2.5.1 Project Planning (Scoping) 2.5.2 Problem Definition, Site History, and Background	9 10 Site maps included in Appendix 1	- Project Planning Session Documentation (including Data Needs tables) - Project Scoping Session Participants Sheet - Problem Definition, Site History, and Background - Site Maps (historical and present)
2.6 Project Quality Objectives and Measurement Performance Criteria 2.6.1 Development of Project Quality Objectives Using the Systematic Planning Process 2.6.2 Measurement Performance Criteria	11 12	- Site-Specific PQOs - Measurement Performance Criteria Table

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
2.7 Secondary Data Evaluation	13	- Sources of Secondary Data and Information - Secondary Data Criteria and Limitations Table
2.8 Project Overview and Schedule 2.8.1 Project Overview 2.8.2 Project Schedule	14 15 16	- Summary of Project Tasks - Reference Limits and Evaluation Table - Project Schedule/Timeline Table
Measurement/Data Acquisition		
3.1 Sampling Tasks 3.1.1 Sampling Process Design and Rationale 3.1.2 Sampling Procedures and Requirements 3.1.2.1 Sampling Collection Procedures 3.1.2.2 Sample Containers, Volume, and Preservation 3.1.2.3 Equipment/Sample Containers Cleaning and Decontamination Procedures 3.1.2.4 Field Equipment Calibration, Maintenance, Testing, and Inspection Procedures 3.1.2.5 Supply Inspection and Acceptance Procedures 3.1.2.6 Field Documentation Procedures	17 18 19 20 21 22	- Sampling Design and Rationale - Sample Location Map - Sampling Locations and Methods/ SOP Requirements Table - Analytical Methods/SOP Requirements Table - Field Quality Control Sample Summary Table - Sampling SOPs - Project Sampling SOP References Table - Field Equipment Calibration, Maintenance, Testing, and Inspection Table
3.2 Analytical Tasks 3.2.1 Analytical SOPs 3.2.2 Analytical Instrument Calibration Procedures 3.2.3 Analytical Instrument and Equipment Maintenance, Testing, and Inspection Procedures 3.2.4 Analytical Supply Inspection and Acceptance Procedures	23 24 25	- Analytical SOPs - Analytical SOP References Table - Analytical Instrument Calibration Table - Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
3.3 Sample Collection Documentation, Handling, Tracking, and Custody Procedures 3.3.1 Sample Collection Documentation 3.3.2 Sample Handling and Tracking System 3.3.3 Sample Custody	26	- Sample Collection Documentation Handling, Tracking, and Custody SOPs - Sample Container Identification - Sample Handling Flow Diagram - Example Chain-of-Custody Form and Seal
3.4 Quality Control Samples 3.4.1 Sampling Quality Control Samples 3.4.2 Analytical Quality Control Samples	27	- QC Samples Table - Screening/Confirmatory Analysis Decision Tree
3.5 Data Management Tasks 3.5.1 Project Documentation and Records 3.5.2 Data Package Deliverables 3.5.3 Data Reporting Formats 3.5.4 Data Handling and Management 3.5.5 Data Tracking and Control	28 29	- Project Documents and Records Table - Analytical Services Table - Data Management SOPs
Assessment/Oversight		
4.1 Assessments and Response Actions 4.1.1 Planned Assessments 4.1.2 Assessment Findings and Corrective Action Responses	30 31	- Assessments and Response Actions - Planned Project Assessments Table - Audit Checklists - Assessment Findings and Corrective Action Responses Table
4.2 QA Management Reports	32	- QA Management Reports Table
4.3 Final Project Report		
Data Review		
5.1 Overview		

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
5.2 Data Review Steps 5.2.1 Step I: Verification 5.2.2 Step II: Validation 5.2.2.1 Step IIa Validation Activities 5.2.2.2 Step IIb Validation Activities 5.2.3 Step III: Usability Assessment 5.2.3.1 Data Limitations and Actions from Usability Assessment 5.2.3.2 Activities	33 34 35 36 37	- Verification (Step I) Process Table - Validation (Steps IIa and IIb) Process Table - Validation (Steps IIa and IIb) Summary Table - Usability Assessment
5.3 Streamlining Data Review 5.3.1 Data Review Steps To Be Streamlined 5.3.2 Criteria for Streamlining Data Review 5.3.3 Amounts and Types of Data Appropriate for Streamlining	36	

QAPP Worksheet #3
Distribution List

QAPP Recipients	Title	Organization	Telephone Number	Fax Number	E-mail Address	Document Control Number
Diego Garcia	Remedial Project Manager (RPM)	USEPA	(212) 637-4947		Garcia.diego@epamail.epa.gov	CDESS-QAPP-01
Ken Maas	KCD Project Manager (PM)	USACE	(816) 983-3709		Kenneth.e.maas@usace.army.mil	CDESS-QAPP-02
Patrick Nejand	Contracting Officer Representative (COR)	USACE	(732) 846-5830		Patrick.c.nejand@uace.army.mil	CDESS-QAPP-03
Paula Higgins	Chief NYD Safety	USACE	(212) 264-9050			CDESS-QAPP-04
Chris Nastasi	Project Engineer	USACE	(732) 846-5830		Chris.j.nastasi@usace.army.mil	CDESS-QAPP-05
Ben Girard	PM	Arcadis	(716) 667-0900		Ben.girard@arcadis-us.com	CDESS-QAPP-06
William Zambrana	Contractor Quality Control Systems Manager (CQCSM)	Sevenson	(908) 769-5301	(908) 769-5303	wzambrana@sevenson.com	CDESS-QAPP-07
Jennifer Singer	Data Quality Control Review Chemist	Sevenson	(716) 284-0431	(716) 285-4201	jsinger@sevenson.com	CDESS-QAPP-08
Agnes Huntley	PM	Spectrum Analytical, Inc. (Spectrum)	(401) 732-3400	(401) 732-3499	ang@spectrum-analytical.com	CDESS-QAPP-09

QAPP Worksheet #4-1
Project Personnel Sign-Off Sheet

Organization: Sevenson

Project Personnel	Title	Telephone Number	Signature	Date
Kim Lickfield	PM	(908) 769-5301		7-10-12
William Zambrana	CQCSM	(908) 769-5301		7-10-12
Ken Paisley	Regulatory Specialist	(716) 284-0431		7/10/12
Jennifer Singer	Data Quality Control Review Chemist	(716) 284-0431	Jennifer Singer	7/10/12
Al LaGreca	Program Manager	(716) 284-0431		7/10/12

QAPP Worksheet #4-2
Project Personnel Sign-Off Sheet

Organization: USEPA

Project Personnel	Title	Telephone Number	Signature	Date
Diego Garcia	RPM	(212) 637-4947		

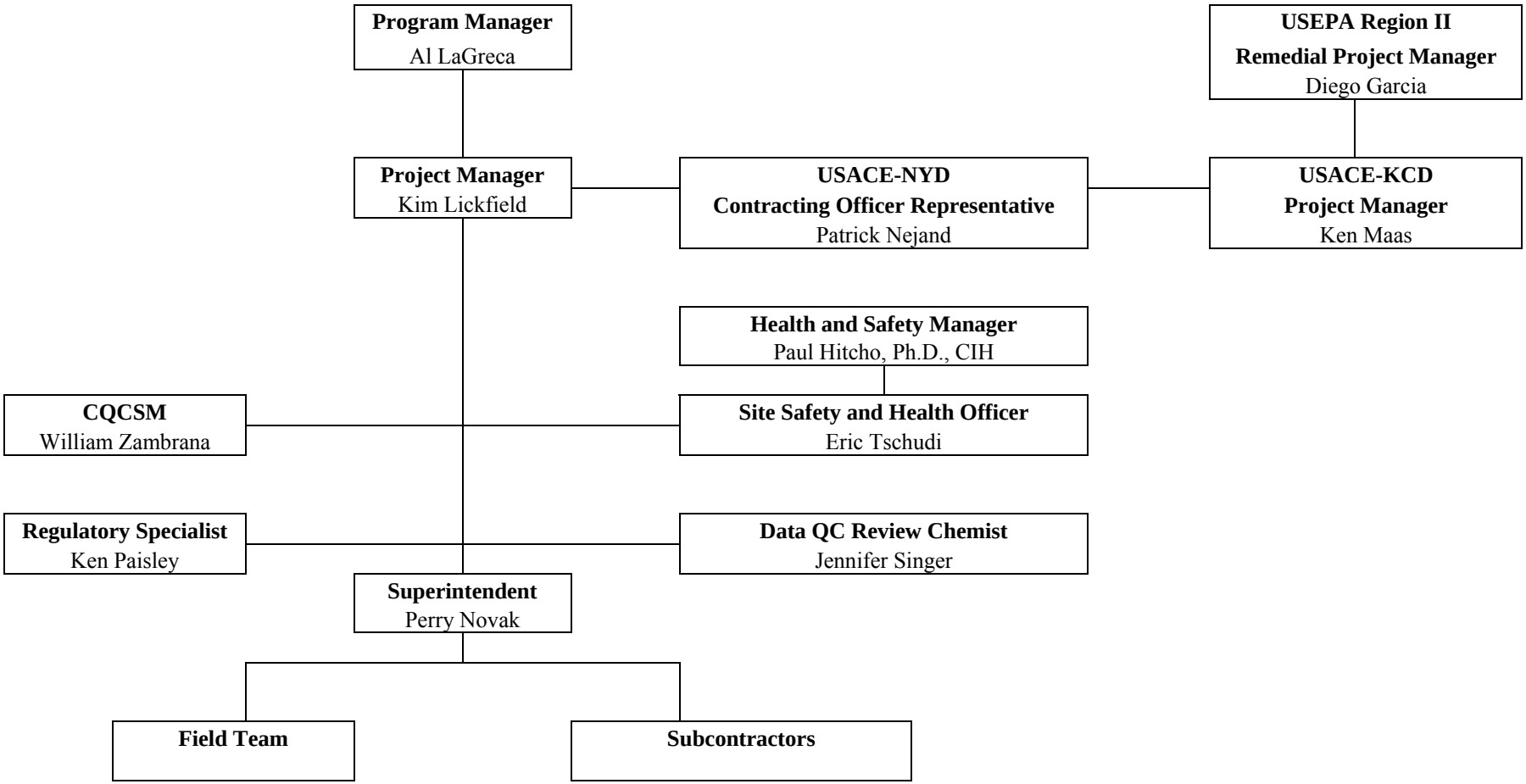
QAPP Worksheet #4-3
Project Personnel Sign-Off Sheet

Organization: USACE

Project Personnel	Title	Telephone Number	Signature	Date
Amy Darpinian	Project Chemist	(816) 389-3897		
Patrick Nejand	COR	(732) 846-5830		
Paula Higgins	Chief NYD Safety	(212) 264-9050		
Chris Nastasi	Project Engineer	(732) 846-5830		

QAPP Worksheet #5
Project Organizational Chart

The organizational chart and the description of project organization and the roles of the team members are summarized below:



Project/Task Organization Overview

The project management team will consist of representatives from USEPA Region II, USACE-KCD, USACE-NYD, NJDEP, and Sevenson. USACE-KCD holds the contract obligations for the project, while USACE-NYD is overseeing the operations aspect of the contract on behalf of USACE-KCD. USEPA and USACE will provide technical oversight to the project and contract management guidance to Sevenson. NJDEP will provide the USEPA with State approval. Sevenson will be the primary contractor and will be responsible for developing and implementing the remedial action and will provide project management to other subcontractors.

Cornell-Dubilier Site Team Members

This section contains a description of the project organizational structure. Diego Garcia is the USEPA RPM with responsibility for the site. Ken Maas is the USACE PM. Sevenson will be the primary contractor and will provide project management to other subcontractors.

Sevenson Home Office Personnel

Paul Hitcho, PhD, CIH –Health and Safety Manager. Dr. Hitcho is a Certified Industrial Hygienist (CIH) with over 20 years experience in managing health and safety issues for government and private remedial projects. Dr. Hitcho will be responsible for review and approval of the Site Safety, Health, and Emergency Response Plan (SSHERP). He will also provide Site Safety and Health Officer (SSHO) supervision, present initial site-specific training to all Site personnel, perform the respirator qualitative fit tests, and develop the air-monitoring program. He will conduct quarterly safety audits/inspections.

Al LaGreca – Program Manager. Mr. LaGreca will be ultimately responsible for the project's success. He will make available all Sevenson resources required to complete the project successfully. He will be kept informed of the project's progress and whether or not the contract is meeting its goals. Mr. LaGreca will resolve problems that cannot be resolved by the Project Manager or the Site Superintendent. He will periodically visit the site and become acquainted with field personnel and other representatives. It is anticipated Mr. LaGreca will be onsite once a month.

Kenneth Paisley, CHMM – Regulatory Specialist/Waste Disposal Coordinator. Mr. Paisley is committed to overseeing all field sampling and data acquisition plans, as well as interfacing with offsite laboratory concerns. Mr. Paisley will review laboratory reports with the selected laboratory in order to ensure compliance with project specifications and all required protocols. He will coordinate offsite waste removal, including transport, disposal, manifesting, waste profiles, regulatory compliance, and disposal requirements.

Jennifer Singer, REM – Data Quality Control Review Chemist. The Data Quality Control Review Chemist will support the CQCSM. Ms. Singer will perform a data review of all analytical data reports received from the laboratory prior to the submission of the data to the USACE and prior to preparation and completion of the chemical data reporting.

Sevenson Field Personnel

Kim Lickfield – Onsite Project Manager. The responsibilities of the Project Manager will include:

- Subcontractor coordination and oversight.
- Acting as liaison between Sevenson, USACE, and USEPA.
- Charge of all field operations.
- Hiring and termination/reassignment of personnel as necessary to support successful task order implementation.
- Management and coordination of all aspects of the project as defined in the Contract Specifications with an emphasis on adhering to the objectives of the remedial activities.
- Assuring corrective actions are taken for deficiencies cited during audits of sampling/analytical activities.
- Project coordination to implement and comply with the UFP-QAPP in coordination with the USACE, CQCSM, and Environmental Samplers, including the coordination of field and laboratory schedules pertaining to relevant operation/sampling activities and allocation of resources and staffing to implement the quality assurance (QA) and quality control (QC) program.
- Implementation of the SSHERP, including temporarily suspending field activities if the health and safety of personnel are endangered and/or temporarily suspending an individual for field activities for infractions of the SSHERP, pending further consideration by the Health and Safety Director.
- Review of all documents prepared by project personnel, including all relevant field records and logs.

William Zambrana – Contractor Quality Control Systems Manager. As CQCSM, Mr. Zambrana will report directly to the Project Manager on matters concerning quality control. He will have both the authority and the duty to stop whatever operation appears to be out of compliance with the contract documents. The CQCSM is responsible for field chemistry and environmental sampling staff, and responsibility for all records related to personnel, supplies, equipment use, equipment calibration, and waste transportation and disposal.

Eric Tschudi – Site Health and Safety Officer. As SSHO, Mr. Tschudi will report directly to the Corporate Health and Safety Director and be responsible for the implementation of Sevenson's approved SSHERP, including conducting required safety inspections, safety briefings, and reports of safety-related activities.

QAPP Worksheet #6
Communication Pathways

Communication Drivers	Responsible Entity	Name	Phone Number	Procedure
Communication with USEPA	USEPA RPM	Diego Garcia	(212) 637-4947	Primary point of contact with USEPA; can delegate communication to other internal or external points of contact; provides direction to USACE PM; communicates with NJDEP Case Manager.
Communication with USACE (lead agency - contracting)	USACE-KCD PM	Ken Maas	(816) 983-3709	Primary point of contact for USACE regarding contracting
Communication with USACE (lead agency – operations)	USACE-NYD COR	Patrick Nejand	(732) 846-5830	Primary point of contact with USACE regarding field operations; receives direction from USACE Contracting Officer; receives direction from USEPA RPM; provides direction to Sevenson.
UFP-QAPP Amendments	Sevenson	Jennifer Singer	(716) 284-0431	Sevenson Project Manager and CQCSM will initiate changes in the UFP-QAPP. Jennifer Singer will be responsible for revisions to the document. USACE and USEPA must approve all changes prior to implementation. Copies of amendments will be forwarded to all parties.
Change to Field Work	Sevenson	Field Team Leader	(908) 769-5301	Field Team Leader will notify Project Manager and CQCSM of any field variations. Project Manager will in turn notify USACE within 24 hours. Telephone and e-mail notifications are acceptable. All field changes will be documented as detailed in Worksheet #32.
Analytical Data Reporting	Sevenson	Jennifer Singer	(716) 284-0431	Jennifer Singer will review all analytical data. Any deficiencies will be reported to the Project Manager and laboratory Quality Assurance Officer.
Initiation of Corrective Action	Sevenson	William Zambrana	(908) 769-5301	Sevenson Project Manager and/or Data Quality Control Review Chemist will notify CQCSM of any issues and/or deficiencies who will in turn determine whether the need for corrective action is warranted.
Health and Safety	Sevenson	Eric Tschudi	(908) 769-5301	The SSHO will be responsible for ensuring the protocols specified in the SHERP are carried out during field activities. All safety matters will be reported to the SSHO who will in turn inform the Project Manager. If any issues arise during the field activities that the SSHO cannot address, the Corporate Health and Safety Manager, Dr. Paul Hitcho, will be immediately contacted.
Daily Field Sampling Paperwork	Sevenson	William Zambrana	(908) 769-5301	William Zambrana will e-mail or fax daily field sampling paperwork to the Project Manager and Data Quality Control Review Chemist within 2 business days.
Release of Analytical Data	Sevenson	Jennifer Singer William Zambrana	(716) 284-0431 (908) 769-5301	No analytical data can be released until Jennifer Singer has completed the data review and William Zambrana has approved the release.

Communication Drivers	Responsible Entity	Name	Phone Number	Procedure
Reporting Laboratory Data Quality Issues	Spectrum	Agnes Huntley	(401) 732-3400	The laboratory will report all QA/QC issues with project field samples to the CQCSM and Data Quality Control Review Chemist within 2 business days.

QAPP Worksheet #7
Personnel Responsibilities and Qualifications Table

Name	Title	Organizational Affiliation	Responsibilities	Education and Experience Qualifications
Al LaGreca	Program Manager	Sevenson	Oversees project and responds to USEPA and USACE	B.S. Civil Engineering
Kim Lickfield	PM	Sevenson	Manages project – coordinates between lead agency and subcontractors	A.A.S. Construction Technology
William Zambrana	CQCSM	Sevenson	QC oversight	A.S. – Radiation Technology
Jennifer Singer	UFP-QAPP Preparer and Data Quality Control Review Chemist	Sevenson	Prepares UFP-QAPP and performs data review	M.S.- Environmental Pollution Control B.S. – Biochemistry Registered Environmental Manager (REM) certification
Eric Tschudi	SSHO	Sevenson	Oversees health and safety for field activities	11 years Health and Safety experience
Ken Paisley	Regulatory Specialist/Waste Disposal Coordinator	Sevenson	Coordination of offsite waste removal	B.S. – Biology Certified Hazardous Materials Manager (CHMM) certification

QAPP Worksheet #8
Special Personnel Training Requirements Table[1]

Project Function	Specialized Training By Title or Description of Course	Training Provider	Training Date	Personnel/Groups Receiving Training	Personnel Titles/Organizational Affiliation	Location of Training Records/Certificates[2]
All Field Activities[3]	40-hour Annual 8-hour refresher	Sevenson	Various and Updated	All field team members	Sevenson staff, subcontractors	Sevenson database and onsite
Sample Collection	Trained in USEPA, USACE, and NJDEP standard sampling methods	Sevenson	Various and Updated	All field team members	Sevenson staff, subcontractors	Resumes
Sample Analysis	Trained in Department of Defense (DOD) Quality Systems Manual (QSM) and USEPA SW-846 methods	Project Laboratory	Various and Updated	Project Laboratory	All personnel	Laboratory
Data Review and Assessment	None – review performed by an experienced project chemist	Sevenson	Various	Jennifer Singer	Sevenson Data Quality Control Review Chemist	Sevenson database

[1] Other tasks requiring specialized skills and training will be performed by appropriately qualified subcontractors. Training, certification, and permit requirements will be outlined in separate scopes of work for each task.
[2] If training records and/or certificates are on file elsewhere, document their location in this column. If training records and/or certificates do not exist or are not available, then this should be noted.
[3] All field personnel will be required to be Occupational Safety and Health Administration (OSHA) trained.

QAPP Worksheet #9
Project Scoping Session Participants Sheet

Site Name: Cornell-Dubilier Electronics Superfund Site Site Location: South Plainfield, New Jersey Project Name: Operable Unit 1 Soil Remediation Projected Date(s) of Sampling: July – December 2012 Project Manager: Kim Lickfield					
Date of Session: May 2012, June 2012 **Scoping Session Purpose:** Discuss preparation of UFP-QAPP and subsequent responses to the USACE Project Chemist comments					
Name	**Title**	**Affiliation**	**Phone #**	**E-mail Address**	**Project Role**
Jennifer Singer	Project Chemist	Sevenson	(716) 284-0431	jsinger@sevenson.com	UFP-QAPP Preparation
Ken Paisley	Regulatory Specialist	Sevenson	(716) 284-0431	kpaisley@sevenson.com	Regulatory Specialist
Kim Lickfield	Project Manager	Sevenson	(908) 769-5301	klickfield@sevenson.com	PM
William Zambrana	CQCSM	Sevenson	(908) 769-5301	wzambrana@sevenson.com	CQCSM
Amy Darpinian	Project Chemist	USACE	(816) 389-3897	Amy.f.darpinian@usace.army.mil	Project Chemist

May 2012: Sevenson internal discussion/e-mail correspondence regarding the scope of the project and completion of the UFP-QAPP.

May 5, 2012: E-mail correspondence received from Amy Darpinian following telephone conversation regarding the requirement to use the USEPA Field and Analytical Services Teaming Advisory Committee (FASTAC) process for lab procurement for project. USEPA Region 2's FASTAC analytical services strategy requires a tiered decision tree for procuring Superfund analytical services for all non-time critical data collection projects. The work described in this UFP-QAPP is time-critical, due to safety concerns with deep excavations at residential properties. Therefore, it was determined that a subcontracted laboratory would be procured that can meet the five-day turnaround time required for sample results.

June 16, 2012: E-mail correspondence received from Amy Darpinian regarding the requirement to submit data to the USEPA Region II database. The USEPA database does not require that backfill or waste characterization sample results be submitted for inclusion in the database; these are the only sample types expected to be collected by Sevenson. In the event that Sevenson collects any post-excavation soil samples (not anticipated at this time), the results will require submission to the USEPA Region II database.

QAPP Worksheet #10
Problem Definition

PROBLEM DEFINITION

The selected remedy involves the remediation of PCB contamination that is found on residential, commercial, and municipal properties located in the vicinity of the former Cornell-Dubilier Electronics facility. The following remedial action objectives for contaminated soil will address the human health risk and environmental concerns at residential, commercial, and municipal properties in the vicinity of the former Cornell-Dubilier Electronics facility:

- Reduce or eliminate the direct contact threat associated with contaminated soil to levels protective of current land use and considering potential future residential use.
- Prevent exposure and minimize disturbance to the surrounding community of South Plainfield during implementation of the remedial action.

USEPA is using 1 parts per million (ppm) as its Remediation Goal for this action.

A remedial design has been completed and the work included the sampling and analysis required to define the extent of the excavations to be performed under this UFP-QAPP. The remedial design had established three remediation areas to be addressed under the current action. Maps of the general locations of the areas in relation to the former Cornell-Dubilier Electronics facility, as well as specific excavation plans for each area are included in Appendix 1. Large plots of the figures included in Appendix 1 are available onsite and should be referenced for all field activities. The remediation areas are as follows:

- **Property 108, 129, 301, and 303** is located along Hamilton Boulevard and Delmore Avenue. There are eight excavation areas within the property grouping, with excavation depths ranging from 0" to 6" below ground surface (bgs), to 0" to 30" bgs (see Figure 1A, included in Appendix 1). The volume of the excavation is approximately 339 cubic yards (yd^3).
- **Property 116 and 302** is located between Delmore Avenue and Arlington Avenue. There are three excavation areas within the property grouping with excavation depths ranging from 0" to 6" bgs, to 0" to 24" bgs (see Figure 2A, included in Appendix 1). The volume of the excavation is approximately $52yd^3$.
- **Property 128, 304, and 305** is located along Harvard Avenue, Jackson Avenue, and Garibaldi Avenue. There are four excavation areas within the property grouping with excavation depths ranging from 0" to 24" bgs, to 0" to 48" bgs (see Figure 3A, included in Appendix 1). The volume of the excavation is approximately $2,105yd^3$.

If additional properties are identified which require remediation under this contract, an addendum to the UFP-QAPP will be submitted, including all applicable Worksheets.

PROJECT DESCRIPTION

This task addresses the remediation of soils associated with OU-1 of the site. The USEPA signed a ROD for the site in September 2003. The objectives of the current remedial action are:

- Excavation of approximately $2,500yd^3$ of contaminated soil, backfilling with clean fill, and property restoration, as necessary.
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary.

Constituents to be sampled include:

- Fill materials from offsite sources will be sampled and analyzed to prior to bringing it onsite.
- In-situ soil samples will be collected from the excavation areas in accordance with disposal facility criteria.
- Water removed from excavations and decontamination activities will be placed in a storage tank and analyzed in accordance with disposal facility criteria.

PROJECT DECISION CONDITIONS

Samples of topsoil and backfill materials from each offsite source will be collected and analyzed to verify that these materials do not contain contaminant levels that are hazardous to human health or the environment. Written approval from USACE will be received prior to bringing backfill or topsoil to the site. NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS; NJAC 7:26D, November 2009) will be used to determine if borrow materials are free from chemical contamination. NJDEP Unrestricted Use Standards for Radioactive Contamination (NJAC 7:28-12, 2008) will be used to determine if borrow materials are free from naturally occurring radioactive material (NORM). If the borrow materials contain concentrations of chemical or NORM greater than the applicable criteria, the source will be rejected. A new borrow source will be located and sampled for suitability.

Soil and water samples will be collected for waste characterization and disposal facility approval. Waste characterization sample results will be compared against the 40CFR261 *Characteristics of Hazardous Waste* and 40CFR761 *PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* to determine the disposal requirements. Any materials containing Resource Conservation and Recovery Act (RCRA) regulated constituents at concentrations greater than toxicity characteristic leachate procedure (TCLP) criteria will be disposed of as RCRA hazardous waste. Any materials containing concentrations of total PCBs greater than the regulatory standards will be disposed of as Toxic Substance Control Act (TSCA) regulated PCB remediation wastes. Any materials exceeding both criteria will be disposed of as RCRA/TSCA waste.

QAPP Worksheet #11
Project Quality Objectives/Systematic Planning Process Statements

WHO WILL USE THE DATA?

USEPA Region II, USACE-KCD, USACE-NYD, and Sevenson will use the data.

WHAT WILL THE DATA BE USED FOR?

- Backfill materials brought onsite will be sampled and analyzed to verify that the soil is clean for the intended use.
- Waste characterization samples will be collected and analyzed to assess suitability for disposal of waste soil, debris, and waste water. Analytical results from these samples will be submitted to the disposal facility to adequately classify waste materials.

WHAT TYPES OF DATA ARE NEEDED?

A table summarizing the Data Needs and Data Uses is included in Appendix 2.

HOW "GOOD" DO DATA NEED TO BE?

The data must be technically defensible and of sufficient quality as to support the project data quality objectives (DQO) which are described in Appendix 3. See Worksheet #15 which summarizes the analytes with the associated project action levels and project quantitation limits.

Analytical methods are planned to be definitive data quality. Definitive data is defined as data that are suitable for final decision making. They are generated using rigorous analytical methods such as approved USEPA SW-846 reference methods. Definitive data are not restricted in their use unless quality problems require data qualification resulting in unusable data.

WHEN WILL DATA BE COLLECTED?

Data will be collected over the duration of the project. It is expected that samples will be collected beginning in the summer 2012 per the project schedule included in Worksheet #16. The estimated number of samples to be collected at each sampling location is described in Worksheet #20.

WHO WILL COLLECT AND GENERATE THE DATA?

The Sevenson sampling team will collect all the samples. The samples will be analyzed for chemical parameters by a NJDEP and DOD Environmental Laboratory Accreditation Program (ELAP) certified subcontracted laboratory. Analytical data will be managed by Sevenson.

HOW WILL THE DATA BE REPORTED?

The data will be reported by the subcontracted laboratory to Sevenson. Sevenson will provide the data to USACE and USEPA for immediate use/decision making in an excel spreadsheet. Full laboratory data reports will be delivered directly to Sevenson for data review. Following receipt of the validated and/or reviewed data, Sevenson will generate a Quality Control Summary Report (QCSR). The QCSR will include a summary of all chemical sampling activities and will include an evaluation of the achievement of project DQO. In addition, analytical data will be reported electronically in a manner that is equivalent or may be transformed into a format consistent with the Electronic Data Deliverable (EDD) format

specified by USEPA Region II, as documented in *Electronic Data Deliverable (EDD) Comprehensive Specification Manual 1.1 (November 2007)*, and current updates. It is anticipated that the EDD will be reported by the subcontracted laboratory in USACE Automated Data Review (ADR) format. Following review of the data using the ADR software, the data will be maintained in the USACE Environmental Data Management System (EDMS) database, which will allow for generation of the data in the USEPA Region II EDD format. Hardcopy analytical data will meet USACE EM200-1-6 *Chemical Quality Assurance for HTRW Projects (October 1997)*. In addition, as required by USEPA Region II, Sevenson will adhere to the Analytical Services Tracking System (ANSETS) reporting requirement for all work performed by the subcontracted laboratory.

HOW WILL THE DATA BE ARCHIVED?

Electronic data will be archived in the EDMS project database to be maintained by Sevenson. As stated, sample results will be provided to USEPA for final upload to their systems in a manner consistent with the requirements of *Electronic Data Deliverable (EDD) Comprehensive Specification Manual 1.1 (November 2007)*, and current updates. Hard copies of laboratory reports will also be kept in the Sevenson project files. Data will be transferred to the USACE upon completion of the project. Retrieval of data by others will be at the discretion of the USACE and the USEPA. The length of time that records will be archived will be at the discretion of the USACE and the USEPA.

QAPP Worksheet #12
Measurement Performance Criteria Table

Precision, Accuracy, Representativeness, Completeness, and Comparability

To measure and control the quality of analyses, certain QA parameters are defined and utilized in data analysis activities. These parameters are defined below.

Precision. Precision measures the reproducibility of data or measurements under specific conditions. Precision in a quantitative measure of the variability of a group of data compared to their average value. Duplicate precision is stated in terms of relative percent difference (RPD) of absolute difference between two measurements. Measurement of precision is dependent upon sampling technique and analytical method. Field duplicate and laboratory duplicate samples will be used to measure precision for project samples. Both sampling and analysis will be as consistent as possible.

For chemical determinations, laboratory and field duplicate precision is stated in terms of RPD of absolute difference between two measurements. For a pair of measurements, RPD (or absolute difference) will be used, as presented below:

$$RPD = \left(\frac{|X_1 - X_2|}{\frac{(X_1 + X_2)}{2}} \right) \times 100$$

Where: X_1 and X_2 = the two replicate values

For radiological determinations, normalized absolute difference (NAD) is used to statistically determine the number of units of standard error of difference between means and the measured results differ from zero. NAD is calculated as presented below:

$$\text{NAD} = \frac{|\text{sample} - \text{replicate}|}{\sqrt{(\text{U}_{\text{sample}})^2 + (\text{U}_{\text{replicate}})^2}}$$

Where: Sample = concentration in the first sample (original)
Replicate = concentration in second sample (replicate)
U_{sample} = uncertainty of the sample
$U_{replicate}$ = uncertainty of the replicate

If the RPD or NAD acceptance criteria for field or laboratory duplicate samples are not achieved, field-sampling procedures will be reviewed with sampling personnel. In addition, the laboratory will be made aware of the discrepancy such that they may review internal sample preparation and analysis procedures.

Accuracy. Accuracy measures the bias in a measurement system. Sources of error include the sampling process, field contamination, preservation, handling, shipping, sample matrix, sample preparation, and analysis technique. Analytical accuracy will be assessed through surrogate spikes, matrix spikes, and laboratory control samples. In general, accuracy is measured in terms of percent recovery:

$$\%R = \frac{|SSR - SR|}{SA} \times 100$$

Where: SSR = measured value of the spiked sample
SR = measured value of the unspiked sample
SA = known amount of the spike in the sample

Representativeness. Representativeness expresses the degree to which data accurately and precisely reflects a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Representativeness is a qualitative parameter that is dependent upon the proper design and implementation of the sampling program and proper laboratory protocol. The sampling design created for this project was designed to provide data representative of site conditions. During development of the sampling designs, consideration was give to the past history of contamination at the site, existing analytical data, physical setting, and process. Representativeness will be satisfied by determining that the UFP-QAPP is followed, proper sampling techniques, preservation, and handling are used, proper analytical procedures are followed, and holding times for the samples are not exceeded in the laboratory.

Completeness. Completeness is a measure of the amount of usable data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. It is expected that the laboratory used for this project will provide data that meet the QC acceptance criteria for 90 percent, or more, of all samples analyzed. Following the completion of the analytical testing, the percent completeness will be calculated using the following equation:

$$\%C = \left(\frac{V}{N}\right) \times 100$$

Where: V = number of measurements judged valid
N = total number of sample results

The data review process will be used to determine the quality and quantity of usable analytical data generated.

The completeness acceptance criterion for samples collected in the field will be 90 percent of the quantity of samples planned for collected in the UFP-QAPP. Corrective action may be implemented to recollect samples where necessary and possible (e.g., modifying a planned sample location, sample jars broken during shipment). Laboratory notification of sample receipt conditions will be used to determine, as soon as possible, whether any problems during sample shipment would necessitate recollection of samples.

Comparability. Comparability expresses the confidence with which one data set can be compared to another. The extent to which existing and planned analytical data will be comparable depends on the similarity of sampling and analytical methods. The procedures used to obtain the planned analytical data are expected to provide comparable data. The procedures used will be USEPA promulgated methods, well recognized and commonly used for environmental investigations.

Desired Method Sensitivity. Depending upon the use to the data and the type of test parameter, specific quantitation limits (QLs) will be required. Worksheet #15 lists the required QLs. In each case, the QLs are well below the project action levels which are also listed or referenced.

QAPP Worksheet #12-1
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	Metals, Cyanide
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	Data Quality Indicators (DQIs)	Measurement Performance Criteria (MPC)	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	SW846 6010C SW846 7471B SW846 9012	Accuracy	Recovery: 80-120%	Matrix Spike (MS)	A
		Precision	RPD: ≤20%	Laboratory Duplicate	A
		Accuracy	Recovery: 80-120%	Laboratory Control Sample (LCS)	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ reporting limit (RL) and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Sensitivity, Accuracy	No analytes detected > limit of detection (LOD)	Calibration Blank	A
		Accuracy	ICS-A: Absolute value of concentration for all non-spiked analytes <LOD ICS-AB: within ±20% of true value	Interference Check Sample (ICS; method SW846 6010C only)	A
		Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample	Serial Dilution	A
		Accuracy	Recovery: 75-125%	Post-Digestion Spike (PDS; method SW846 6010C only)	A
		Accuracy	Recovery: 85-115%	Recovery Test (method SW846 7471B only)	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-2
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	VOCs, Semi-Volatile Organic Compounds (SVOCs), Pesticides, PCBs
Concentration Level	Trace (VOCs,), Low (SVOCs, Pesticides, PCBs)

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	SW846 8260B SW846 8270D SW846 8081B SW846 8082A	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/Matrix Spike Duplicate (MSD)	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Surrogate Spikes	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-3
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	Radiological Parameters
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	HASL-300 (or equivalent gamma spectroscopy method)	Precision	NAD≤3.92	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Sensitivity	≤RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-4
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP Metals (solid waste characterization to also include copper, nickel, and zinc)
Concentration Level	Low to Medium

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 6010C SW846 7470A	Accuracy	Recovery: 80-120%	MS	A
		Precision	RPD: ≤20%	Laboratory Duplicate	A
		Accuracy	Recovery: 80-120%	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Sensitivity, Accuracy	No analytes detected > LOD	Calibration Blank	A
		Accuracy	ICS-A: Absolute value of concentration for all non-spiked analytes <LOD ICS-AB: within ±20% of true value	ICS (method SW846 6010C only)	A
		Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample	Serial Dilution	A
		Accuracy	Recovery: 75-125%	PDS (method 846 6010C only)	A
		Accuracy	Recovery: 85-115%	Recovery Test (method SW846 7471B only)	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-5
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, PCBs
Concentration Level	Low to High

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 8082A	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/MSD	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Surrogate Spikes	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-6
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Reactivity (Sulfide and Cyanide)
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheets #17-2 and #17-3	SW846 Section 7.3.3.2 and 9012	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
	SW846 Section 7.3.4.2 and 9034	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-7
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Ignitability
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 1010	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-8
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	pH[1]
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	SW846 9045D SW846 9040C	Sensitivity	Must agree within ±0.10 pH unit of true value	Initial Calibration Verification	A
		Sensitivity	±0.05 pH unit of the temperature adjusted pH value	Continuing Calibration Verification	A
		Precision	Must agree within ±0.10 pH units	Laboratory Duplicate	S&A
		Accuracy	4±2ºC	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis for solid waste characterization will be performed on both the solid material and the TCLP extract.

QAPP Worksheet #12-9
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Oil and Grease[1]
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	EPA 1664A	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/MSD	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on both the solid material and the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-10
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Ammonia-Nitrogen[1]
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM 4500NH3 D	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-11
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Chemical Oxygen Demand (COD)[1]
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM5220D	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-12
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Total Volatile Solids
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM2540G	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2ºC	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-13
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Total Solids[1]
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[2]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SM2540B	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Precision	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
		Sensitivity	All target compounds ≤ RL	Method Blank	A
		Accuracy	4±2ºC	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-14
Measurement Performance Criteria Table

Matrix	Solid Waste Characterization
Analytical Group	Free Liquids
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2	SW846 9095	Accuracy	4±2ºC	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

QAPP Worksheet #13
Secondary Data Criteria and Limitations Table

Secondary Data	Data Source (Originating Organization, Report Title, and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used	Limitations on Data Use
Specifications and Drawings	Arcadis/Malcolm Pirnie, 2012	Arcadis/Malcolm Pirnie	Historical data that will define the limits of the soil excavations	None for the current intended project objectives
Historical Data	USEPA Region II, September 2003. "Record of Decision" Cornell-Dubilier Electronics Superfund Site, OU-1, South Plainfield, New Jersey.	Foster Wheeler Environmental Corporation, August 2001. "Final Remedial Investigation Report for Operable Unit 1 (OU-1) Offsite Soils, for Cornell-Dubilier Electronics Superfund Site, South Plainfield, Middlesex County, New Jersey." Foster Wheeler Environmental Corporation, August 2001. "Final Feasibility Study Report for Operable Unit 1 (OU-1) Offsite Soils, for Cornell-Dubilier Electronics Superfund Site, South Plainfield, Middlesex County, New Jersey."	Historical data that will define the limits of the soil excavations	None for the current intended project objectives

QAPP Worksheet #14
Summary of Project Tasks

Sampling Tasks: Samples will be collected for analytical parameters from the locations described in Worksheets #17 and #18 per the instructions in Worksheet #17. The following list represents the types of samples to be collected during the course of field activities:

- **Offsite Topsoil/Backfill Sampling.** Backfill material obtained from offsite sources will be tested for chemical parameters prior to use in order to determine that the materials do not present a threat to human health and/or the environment.
- **Solid Waste Characterization Sampling.** Waste characterization samples will be collected from excavated soil and debris for waste characterization and disposal facility approval. More specific information on solid waste disposal can be found in the Transportation and Disposal Plan, submitted under separate cover.
- **Wastewater Characterization Sampling.** Wastewater generated during site activities (e.g., decontamination water, storm water) will be containerized in an aboveground storage tank and samples will be collected to determine the waste management approach.

Analysis Tasks: Analytical methodologies are described in Worksheets #19 and #23. The following list represents the analysis required for each sample type to be collected during the course of field activities:

- **Offsite Topsoil/Backfill Sampling.** Laboratory analysis will be performed on these samples for metals, cyanide, VOCs, SVOCs, pesticides, PCBs, and radiological parameters, according to NJAC 7:26D (November 2009) and NJAC 7:26E (May 2012).
- **Solid Waste Characterization Sampling.** Materials will be disposed of at a disposal facility located in Pennsylvania; therefore, laboratory analysis will be performed to meet the requirements of the Pennsylvania Department of Environmental Protection, Bureau of Waste Management, Form U. At a minimum, laboratory analysis will be performed on these samples for corrosivity, ignitability, hydrogen cyanide reactivity, hydrogen sulfide reactivity, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, total PCBs, total solids, total volatile solids, oil and grease, ammonia-nitrogen, COD, and free liquids. Additional analyses may be performed at the direction of the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.
- **Wastewater Characterization Sampling.** Laboratory analysis will be performed on these samples for corrosivity, ignitability, hydrogen cyanide reactivity, hydrogen sulfide reactivity, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, and total PCBs. Additional analyses may be performed at the direction of the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.

Quality Control Tasks: The analytical laboratories will be required to analyze QC samples listed in the documents and procedures give in Worksheet #28. Laboratory analytical data will undergo internal reviews and validation prior to release of the analytical data reports and EDDs. Sevenson will also review laboratory analytical data as described in Worksheets #31 and #36.

In addition, the field sampling team will be required undergo internal QC assessments, including review of field sampling activities, documentation, and health and safety compliance as described in Worksheet #31.

Secondary Data: Reports and analytical data associated with prior investigations are defined in Worksheet #13. These documents have been reviewed by Sevenson and their contents utilized in the development of the UFP-QAPP for the current scope of work.

Data Management Tasks: Both hard copy and electronic data deliverables will be tracked, stored, handled, and managed. All data, field notes, and analytical information will be placed in an electronic database which will be maintained in the Sevenson corporate office. All electronic data will be backed up. Hardcopies of data will be stored in project files.

Documentation and Records: All hardcopy data (e.g., field notebooks, photos, hard copies of chain of custody forms, airbills, etc.) will be taken to the Sevenson corporate office and kept in the project files.

Assessment/Audit Tasks: Planned project assessments are defined in Worksheet #31. Audits of field staff compliance with project standard operating procedures (SOPs) will be performed within the first week of sample collection and periodically thereafter as determined by the Project CQCSM or the field team leader. Checklists used during field audits, including task-specific quality control checklists, are included in Appendix 5. Audits of laboratory compliance with SOPs will be performed on a periodic basis as determined by the laboratory QA manager. In addition, laboratory data will be audited as part of the data validation process as defined in this UFP-QAPP. The laboratory may be audited onsite by Sevenson at any time based on need determined by the Sevenson project chemist.

Subcontracted laboratories will maintain current requirements for certification required by NJDEP and DOD ELAP.

Data Review Tasks: Chemical data that is generated will be reviewed by Sevenson against the criteria in the applicable analytical SOP. See also Worksheets #23, #28, #35, and #36.

Data review by Sevenson will include, but may not be limited to, the following parameters:

- Data completeness
- Holding time
- Laboratory control samples
- Method blanks
- Surrogate spikes
- Matrix spike and matrix spike duplicates
- Laboratory and field duplicates

A QCSR will be provided to summarize the results of the data review findings and to present conclusions regarding the usability of the data for project objectives. The report will assess the accuracy, precision, representativeness, comparability, and completeness of the data generated. The report will focus on out of control data results and present a table of non-compliant results that exceeded some QC requirement.

QAPP Worksheet #15-1
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: VOCs
Concentration Level: Trace

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Acetone	67-64-1	70,000,000	10	NA	NA	3.5	5
Acrolein	107-02-8	500	500	NA	NA	5.1	25
Acrylonitrile	107-13-1	900	500	NA	NA	1.2	5
Benzene	71-43-2	2,000	5	NA	NA	0.86	5
Bromodichloromethane	75-27-4	1,000	5	NA	NA	1.1	5
Bromoform	75-25-2	81,000	5	NA	NA	1.4	5
Bromomethane	74-83-9	25,000	5	NA	NA	1.4	5
2-Butanone	78-93-3	3,100,000	10	NA	NA	2.8	5
Carbon Disulfide	75-15-0	7,800,000	500	NA	NA	0.66	5
Carbon Tetrachloride	56-23-5	600	5	NA	NA	1.1	5
Chlorobenzene	108-90-7	510,000	5	NA	NA	0.96	5
Chloroethane	75-00-3	220,000	5	NA	NA	1.7	5
Chloroform	67-66-3	600	5	NA	NA	0.82	5
Chloromethane	74-87-3	4,000	5	NA	NA	0.74	5
Dibromochloromethane	124-48-1	3,000	5	NA	NA	0.77	5
1,2-Dibromo-3-chloropropane	96-12-8	80	5	NA	NA	0.67	5
1,2-Dibromoethane	106-93-4	8	5	NA	NA	1.5	5
1,2-Dichlorobenzene	95-50-1	5,300,000	5	NA	NA	0.44	5
1,3-Dichlorobenzene	541-73-1	5,300,000	5	NA	NA	0.30	5
1,4-Dichlorobenzene	106-46-7	5,000	5	NA	NA	0.25	5
Dichlorodifluoromethane	75-71-8	490,000	5	NA	NA	3.6	5
1,1-Dichloroethane	75-34-3	8,000	5	NA	NA	0.94	5
1,2-Dichloroethane	107-06-2	900	5	NA	NA	0.9	5
1,1-Dichloroethene	75-35-4	11,000	5	NA	NA	0.98	5
cis-1,2-Dichloroethene	156-59-2	230,000	5	NA	NA	1.2	5
trans-1,2-Dichloroethene	156-60-5	300,000	5	NA	NA	1.1	5

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
1,2-Dichloropropane	78-87-5	2,000	5	NA	NA	1.2	5
1,3-Dichloropropene (cis and trans)	10061-01-5 (cis) 10061-02-6 (trans)	2,000	5	NA	NA	0.62 (cis) 1 (trans)	5 (cis) 5 (trans)
Ethylbenzene	100-41-4	7,800,000	5	NA	NA	1.2	5
Methyl Acetate	79-20-9	78,000,000	5	NA	NA	1.4	5
Methylene Chloride	75-09-2	34,000	5	NA	NA	0.64	5
Methyl tert-butyl ether	1634-04-4	110,000	5	NA	NA	0.77	5
Styrene	100-42-5	90,000	5	NA	NA	1.1	5
Tertiary Butyl Alcohol	75-65-0	1,400,000	100	NA	NA	5	10
1,1,2,2-Tetrachloroethane	79-34-5	1,000	5	NA	NA	1.1	5
Tetrachloroethene	127-18-4	2,000	5	NA	NA	1.2	5
Toluene	108-88-3	6,300,000	5	NA	NA	0.54	5
1,2,4-Trichlorobenzene	120-82-1	73,000	5	NA	NA	0.33	5
1,1,1-Trichloroethane	71-55-6	290,000	5	NA	NA	0.76	5
1,1,2-Trichloroethane	79-00-5	2,000	5	NA	NA	0.66	5
Trichloroethene	79-01-6	7,000	5	NA	NA	0.77	5
Trichlorofluoromethane	75-69-4	23,000,000	5	NA	NA	2.6	5
Vinyl Chloride	75-01-4	700	5	NA	NA	1	5
Xylenes (total)	1330-20-7	12,000,000	5	NA	NA	1.1	5

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil practical quantitation limit (PQL) listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical method detection limits (MDLs) and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-2
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: SVOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Acenaphthene	83-32-9	3,400,000	200	NA	660	8.4	170
Acenaphthylene	208-96-8	NS	200	NA	660	10	170
Acetophenone	98-86-2	2,000	200	NA	ND	20	170
Anthracene	120-12-7	17,000,000	200	NA	660	19	170
Atrazine	1912-24-9	210,000	200	NA	ND	24	170
Benzaldehyde	100-52-7	6,100,000	200	NA	ND	49	170
Benzidine	92-87-5	700	700	NA	NA	61	170
Benzo(a)anthracene	56-55-3	600	200	NA	660	17	170
Benzo(a)pyrene	50-32-8	200	200	NA	660	25	170
Benzo(b)fluoranthene	205-99-2	600	200	NA	660	46	170
Benzo(g,h,i)perylene	191-24-2	380,000,000	200	NA	660	17	170
Benzo(k)fluoranthene	207-08-9	6,000	200	NA	660	19	170
1,1'-Biphenyl	92-52-4	3,100,000	200	NA	ND	17	170
Bis(2-chloroethyl)ether	111-44-4	400	200	NA	660	74	170
Bis(2-chloroisopropyl)ether	108-60-1	23,000	200	NA	660	0.33	170
Bis(2-ethylhexyl)phthalate	117-81-7	35,000	200	NA	660	8.6	170
Butyl benzyl phthalate	85-68-7	1,200,000	200	NA	660	6.3	170
Caprolactam	105-60-2	31,000,000	200	NA	ND	25	170
Carbazole	86-74-8	24,000	200	NA	ND	10	170
2-Chlorophenol	95-57-8	310,000	200	NA	660	17	170
Chrysene	218-01-9	62,000	200	NA	660	25	170
Dibenzo(a,h)anthracene	53-70-3	200	200	NA	660	5.8	170
3,3'-Dichlorobenzidine	91-94-1	1,000	200	NA	1,300	52	170
2,4-Dichlorophenol	120-83-2	180,000	200	NA	660	17	170
Diethyl phthalate	84-66-2	49,000,000	200	NA	660	7.8	170
2,4-Dimethylphenol	105-67-9	1,200,000	200	NA	660	53	170
di-n-Butyl phthalate	84-74-2	6,100,000	200	NA	ND	5.8	170

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
4,6-Dinitro-2-methylphenol[4]	534-52-1	6,000	300	NA	3,300	30	330
2,4-Dinitrophenol[4]	51-28-5	120,000	300	NA	3,300	100	330
2,4-Dinitrotoluene	121-14-2	700	200	NA	660	6	170
2,6-Dinitrotoluene	606-20-2	700	200	NA	660	8.8	170
di-n-Octylphthalate	117-84-0	2,400,000	200	NA	ND	44	170
1,2-Diphenylhydrazine	122-66-7	700	700	NA	NA	170	330
Fluoranthene	206-44-0	2,300,000	200	NA	660	18	170
Fluorene	86-73-7	2,300,000	200	NA	660	7.8	170
Hexachlorobenzene	118-74-1	300	200	NA	660	7.9	170
Hexachlorobutadiene	87-68-3	6,000	200	NA	660	32	170
Hexachlorocyclopentadiene	77-47-4	45,000	200	NA	660	32	170
Hexachloroethane	67-72-1	35,000	200	NA	660	96	170
Indeno(1,2,3-cd)pyrene	193-39-5	600	200	NA	660	8.9	170
Isophorone	78-59-1	510,000	200	NA	660	51	170
2-Methylnaphthalene	91-57-6	230,000	170	NA	660	20	170
2-Methylphenol	95-48-7	310,000	200	NA	660	23	170
4-Methylphenol	106-44-5	31,000	200	NA	660	22	170
Naphthalene	91-20-3	6,000	200	NA	660	23	170
2-Nitroaniline[4]	88-74-4	39,000	300	NA	3,300	5.5	330
Nitrobenzene	98-95-3	31,000	200	NA	660	18	170
N-Nitrosodimethylamine	62-75-9	700	700	NA	NA	36	170
N-Nitroso-di-n-propylamine	621-64-7	200	200	NA	660	68	170
N-Nitrosodiphenylamine	86-30-6	99,000	200	NA	660	47	170
Pentachlorophenol[4]	87-86-5	3,000	300	NA	3,300	82	330
Phenanthrene	85-01-8	NS	200	NA	660	6.9	170
Phenol	108-95-2	18,000,000	200	NA	660	29	170
Pyrene	129-00-0	1,700,000	200	NA	660	7.4	170
2,4,5-Trichlorophenol[4]	95-95-4	6,100,000	200	NA	660	53	330
2,4,6-Trichlorophenol	88-06-2	19,000	200	NA	660	26	170

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009). "NS" indicates that there is no criterion listed for the analyte.

[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).

[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-3
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Pesticides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8081B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Aldrin	309-00-2	40	2	NA	NA	0.15	1.7
Chlordane (alpha and gamma)	57-74-9	200	2	NA	NA	0.12 (alpha-) 0.11 (gamma-)	1.7 (alpha-) 1.7 (gamma-)
4,4'-DDD[4]	72-54-8	3,000	3	NA	NA	0.28	3.3
4,4'-DDE[4]	72-55-9	2,000	3	NA	NA	0.24	3.3
4,4'-DDT[4]	50-29-3	2,000	3	NA	NA	0.25	3.3
Dieldrin[4]	60-57-1	40	3	NA	NA	0.24	3.3
Endosulfan I and Endosulfan II[4]	115-29-7	470,000	3	NA	NA	0.035 (-I) 0.089 (-II)	1.7 (-I) 3.3 (-II)
Endosulfan sulfate[4]	1031-07-8	470,000	3	NA	NA	0.23	3.3
Endrin[4]	72-20-8	23,000	3	NA	NA	0.25	3.3
Alpha-BHC	319-84-6	100	2	NA	NA	0.11	1.7
Beta-BHC	319-85-7	400	2	NA	NA	0.13	1.7
Heptachlor	76-44-8	100	2	NA	NA	0.11	1.7
Heptachlor epoxide	1024-57-3	70	2	NA	NA	0.11	1.7
Gamma-BHC	58-89-9	400	2	NA	NA	0.11	1.7
Methoxychlor	72-43-5	390,000	20	NA	NA	2.2	17
Toxaphene	8001-35-2	600	200	NA	NA	5.5	170

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-4
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: PCBs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits[4]	
				MDLs (µg/Kg)	Method QLs (µg/Kg)[3]	MDLs (µg/Kg)	QLs (µg/Kg)
Aroclor 1016	12674-11-2	200	30	0.057-0.070	38-47	2.5	33
Aroclor 1221	11104-28-2			0.057-0.070	38-47	12	33
Aroclor 1232	11141-16-5			0.057-0.070	38-47	1.9	33
Aroclor 1242	53469-1-9			0.057-0.070	38-47	1.7	33
Aroclor 1248	12672-29-6			0.057-0.070	38-47	3.8	33
Aroclor 1254	11097-69-1			0.057-0.070	38-47	1.9	33
Aroclor 1260	11096-82-5			0.057-0.070	38-47	2.1	33

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical MDLs and QLs are those documented in validated methods. Per SW-846 Method 8082, the Estimated Quantitation Limit is the MDL times a factor (use 670 for low-concentration soil).
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-5
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Metals and Cyanide
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (mg/Kg)[1]	Project Quantitation Limit Goal (mg/Kg)[2]	SW-846 6010C/7471B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/Kg)	Method QLs (mg/Kg)	MDLs (mg/Kg)	QLs (mg/Kg)
Aluminum	7429-90-5	78,000	20	NA	NA	1.2	10
Antimony	7440-36-0	31	6	NA	NA	0.18	1
Arsenic	7440-38-2	19	1	NA	NA	0.16	1
Barium	7440-39-3	16,000	20	NA	NA	0.38	10
Beryllium	7440-41-7	16	0.5	NA	NA	0.002	0.25
Cadmium	7440-43-9	78	0.5	NA	NA	0.013	0.25
Chromium	7440-47-3	240	2	NA	NA	0.054	1
Cobalt	7440-48-4	1,600	5	NA	NA	0.035	2.5
Copper	7440-50-8	3,100	3	NA	NA	0.42	1.5
Cyanide	57-12-5	1,600	3	NA	NA	NA	2.5
Lead	7439-92-1	400	1	NA	NA	0.14	0.5
Manganese[4]	7439-96-5	11,000	2	NA	NA	0.47	2.5
Mercury	7439-97-6	23	0.1	NA	NA	0.0048	0.033
Nickel	7440-02-0	1,600	4	NA	NA	0.066	2.5
Selenium	7782-49-2	390	4	NA	NA	0.78	1.5
Silver[4]	7440-22-4	390	1	NA	NA	0.079	1.5
Thallium	7440-28-0	5	3	NA	NA	0.24	1
Vanadium	7440-62-2	78	5	NA	NA	0.038	2.5
Zinc	7440-66-6	23,000	6	NA	NA	0.27	2.5

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, November 2009).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, November 2009).
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-6
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Radiological Parameters
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (pCi/g)[1]	Project Quantitation Limit Goal (pCi/g)	HASL-300 (or equivalent gamma spectroscopy method)			
				Analytical Method[2]		Achievable Laboratory Limits	
				MDLs (pCi/g)	Method QLs (pCi/g)	MDLs (pCi/g)	QLs (pCi/g)[3]
Ac-228	14331-83-0	NA[4,7]	1	NA	NA	NA	1
Th-232	7440-29-1	2	1	NA	NA	NA	1
Bi-214	14733-03-0	NA[5,7]	1	NA	NA	NA	1
Pb-214	15067-28-4	NA[5,7]	1	NA	NA	NA	1
Ra-226	13982-63-3	2	1	NA	NA	NA	1
Th-234	15065-10-8	NA[6,7]	1	NA	NA	NA	1
U-238	24678-82-8	14	1	NA	NA	NA	1

[1] Project action limits obtained from NJAC 7:28-12 (2008).
[2] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and method QLs are not provided in the most recent version of the method for the parameters and matrices of interest.
[3] The achievable laboratory limit is based on the highest expected minimum detectable activity (MDA). MDAs are calculated by the laboratory for each sample analyzed.
[4] The Ac-228 result will be reported by the laboratory and will be used to quantitate the Th-232 activity. There is no action limit listed in NJAC 7:28-12 for Ac-228.
[5] The Bi-214 and Pb-214 results will be reported by the laboratory and will be used to quantitate the Ra-226 activity. There are no action limits listed in NJAC 7:28-12 for Bi-214 and Pb-214.
[6] The Th-234 result will be reported by the laboratory and will be used to quantitate the U-238 activity. There is no action limit listed in NJAC 7:28-12 for Th-234.
[7] Uranium, thorium, and radium decay chain daughter isotopes are assumed to be in secular equilibrium with the parent isotope.

QAPP Worksheet #15-7
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Metals
Concentration Level: Low to Medium

Analyte[1]	CAS Number	Project Action Limit (mg/L)[2]	Project Quantitation Limit Goal (mg/L)[3]	SW-846 6010C/7470A			
				Analytical Method[4]		Achievable Laboratory Limits	
				MDLs (mg/L)	Method QLs (mg/L)	MDLs (mg/L)	QLs (mg/L)
Arsenic	7440-38-2	5.00	0.5	NA	NA	0.0053	0.02
Barium	7440-39-3	100.00	10	NA	NA	0.0085	0.20
Cadmium	7440-43-9	1.00	0.1	NA	NA	0.00014	0.005
Chromium	7440-47-3	5.00	0.5	NA	NA	0.0011	0.02
Lead	7439-92-1	5.00	0.5	NA	NA	0.0022	0.01
Mercury	7439-97-6	0.20	0.02	NA	NA	0.000016	0.0002
Selenium	7782-49-2	1.00	0.1	NA	NA	0.0066	0.03
Silver	7440-22-4	5.00	0.5	NA	NA	0.00059	0.03
Copper	7440-50-8	NS	-	NA	NA	0.0036	0.03
Nickel	7440-02-0	NS	-	NA	NA	0.00085	0.05
Zinc	7440-66-6	NS	-	NA	NA	0.0049	0.05

[1] Copper, nickel, and zinc are only required for solid waste characterization samples.
[2] Project action limits are based upon RCRA. This information will be used for disposal. NS indicates that there is no criterion listed for the analyte.
[3] The project quantiation limits are based upon one-tenth of the RCRA limits.
[4] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-8
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP VOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Benzene	71-43-2	500	50	NA	NA	0.12	5.0
2-Butanone	78-93-3	200,000	20,000	NA	NA	2.0	5.0
Carbon Tetrachloride	56-23-5	500	50	NA	NA	0.11	5.0
Chlorobenzene	108-90-7	100,000	10,000	NA	NA	0.23	5.0
Chloroform	67-66-3	6,000	600	NA	NA	0.30	5.0
1,2-Dichloroethane	107-06-2	500	50	NA	NA	0.16	5.0
1,1-Dichloroethene	75-35-4	700	70	NA	NA	0.64	5.0
Tetrachloroethene	127-18-4	700	70	NA	NA	0.27	5.0
Trichloroethene	79-01-6	500	50	NA	NA	0.25	5.0
Vinyl Chloride	75-01-4	200	20	NA	NA	0.78	5.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-9
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP SVOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Cresols[4]	95-48-7 (2-methylphenol) 106-44-5 (4-methylphenol)	200,000	20,000	NA	NA	1.20 (2-) 1.10 (4-)	33.0 (2-) 33.0 (4-)
1,4-Dichlorobenzene	106-46-7	7,500	750	NA	NA	0.63	33.0
2,4-Dinitrotoluene[5]	121-14-2	130	13	NA	NA	1.10	33.0
Hexachlorobenzene[5]	118-74-1	130	13	NA	NA	0.96	33.0
Hexachlorobutadiene	87-68-3	500	50	NA	NA	0.70	33.0
Hexachloroethane	67-72-1	3,000	300	NA	NA	0.73	33.0
Nitrobenzene	98-95-3	2,000	200	NA	NA	0.90	33.0
Pentachlorophenol	87-86-5	100,000	10,000	NA	NA	0.72	66.0
Pyridine	110-86-1	5,000	500	NA	NA	0.86	33.0
2,4,5-Trichlorophenol	95-95-4	400,000	40,000	NA	NA	0.76	66.0
2,4,6-Trichlorophenol	88-06-2	2,000	200	NA	NA	0.91	33.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] Total cresols are reported as 2-methylphenol and 4-methylphenol. The sum of these results equals total cresols. The analytical result reported for 4-methylphenol also includes the concentration for the 3-methylphenol isomer; these two isomers cannot be separated. 3-Methylphenol is not reported as a separate compound.
[5] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-10
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Pesticides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8081B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Chlordane	57-74-9	30	3	NA	NA	0.47	2.5
Endrin	72-20-8	20	2	NA	NA	0.011	0.10
Heptachlor	76-44-8	8	0.8	NA	NA	0.0031	0.05
Lindane (gamma-BHC)	58-89-9	400	40	NA	NA	0.0063	0.05
Methoxychlor	72-43-5	10,000	1,000	NA	NA	0.057	0.50
Toxaphene	8001-35-2	500	50	NA	NA	1.7	5.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-11
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Herbicides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8151A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
2,4-D	94-75-7	10,000	1,000	NA	NA	0.037	3.3
2,4,5-TP	93-72-1	1,000	100	NA	NA	0.02	0.33

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-12
Reference Limits and Evaluation Table

Matrix: Solid Waste Characterization
Analytical Group: PCBs
Concentration Level: Low to High

Analyte	CAS Number	Project Action Limit (mg/Kg)[1]	Project Quantitation Limit Goal (mg/Kg)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/Kg)	Method QLs (mg/Kg)[3]	MDLs (mg/Kg)	QLs (mg/Kg)
Aroclor 1016	12674-11-2	50	5	0.057-0.070	38-47	0.0047	0.033
Aroclor 1221	11104-28-2			0.057-0.070	38-47	0.0028	0.033
Aroclor 1232	11141-16-5			0.057-0.070	38-47	0.0047	0.033
Aroclor 1242	53469-1-9			0.057-0.070	38-47	0.0045	0.033
Aroclor 1248	12672-29-6			0.057-0.070	38-47	0.0049	0.033
Aroclor 1254	11097-69-1			0.057-0.070	38-47	0.0020	0.033
Aroclor 1260	11096-82-5			0.057-0.070	38-47	0.0062	0.033

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. Per SW-846 Method 8082, the Estimated Quantitation Limit is the MDL times a factor (use 670 for low-concentration soil).

QAPP Worksheet #15-13
Reference Limits and Evaluation Table

Matrix: Liquid Waste Characterization
Analytical Group: PCBs
Concentration Level: Low to High

Analyte	CAS Number	Project Action Limit (mg/L)[1]	Project Quantitation Limit Goal (mg/L)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/L)	Method QLs (mg/L)[3]	MDLs (mg/L)	QLs (mg/L)
Aroclor 1016	12674-11-2	50	5	NA	NA	0.00012	0.001
Aroclor 1221	11104-28-2			NA	NA	0.00012	0.001
Aroclor 1232	11141-16-5			NA	NA	0.00019	0.001
Aroclor 1242	53469-1-9			NA	NA	0.000095	0.001
Aroclor 1248	12672-29-6			NA	NA	0.00015	0.001
Aroclor 1254	11097-69-1			NA	NA	0.000056	0.001
Aroclor 1260	11096-82-5			NA	NA	0.00016	0.001

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-14
Reference Limits and Evaluation Table

Matrix: Solid Waste Characterization
Analytical Group: RCRA Characteristics and Pennsylvania Form U Required Parameters
Concentration Level: NA; Low

Analyte	CAS Number	Project Action Limit[1]	Project Quantitation Limit Goal[2]	Analytical Method[3]		Achievable Laboratory Limits	
				MDLs	Method QLs	MDLs	QLs
pH	NA	2-12.5	0.01 pH units	NA	NA	NA	0.1 pH units
Ignitability	10-36-6	Flashpoint <140ºF	NA	NA	NA	NA	Report to nearest 1ºF
Reactive Cyanide	57-12-5	100mg/Kg	10mg/Kg	NA	NA	NA	1mg/Kg
Reactive Sulfide	18496-25-8	500mg/Kg	50mg/Kg	NA	NA	NA	1mg/Kg
Oil and Grease	NA	Solid: NS TCLP Extract: 88,550mg/L	Solid: - TCLP Extract: 8,855mg/L	NA	NA	Solid: 33mg/Kg TCLP extract: 1.2mg/L	Solid: 170mg/Kg TCLP extract: 5.0mg/L
Ammonia-Nitrogen	7664-41-7	111,111mg/L	11,111mg/L	NA	NA	NA	0.2mg/L
COD	NA	NS	-	NA	NA	NA	30mg/L
Total Volatile Solids	NA	NS	-	NA	NA	NA	1%
Total Solids	NA	NS	-	NA	NA	NA	10mg/L
Free Liquids	NA	No free liquids	NA	NA	NA	NA	NA

[1] Project action limits are based upon Pennsylvania Form U. This information will be used for disposal. "NS" indicates that there is no criterion listed for the analyte.
[2] The project quantitation limits are based upon one-tenth of the project action limit.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and method QLs are not provided in the most recent version of the method for the parameters and matrices of interest.

QAPP Worksheet #16
Project Schedule/Timeline Table

Activities	Organization	Dates		Deliverable	Deliverable Due Date
		Anticipated Date(s) of Initiation	Anticipated Date of Completion		
Planning and development of data quality objectives	Sevenson	Completed	Completed	Data Quality Objectives	May 2012
Development of the sampling rationale	Sevenson	Completed	Completed	UFP-QAPP	Revision 0: May 2012 Revision 1: July 2012
Preparation of the UFP-QAPP	Sevenson	Completed	Completed	UFP-QAPP	Revision 0: May 2012 Revision 1: July 2012
Collection of soil samples and submission for analysis – waste characterization, offsite backfill	Sevenson	Summer 2012	Winter 2012/2013	Sample collected per UFP-QAPP	NA
Collection of water samples and submission for analysis – waste characterization	Sevenson	Summer 2012	Winter 2012/2013	Samples collected per UFP-QAPP	NA
Laboratory data analyses review and verification of data	Sevenson	Autumn 2012	Spring 2013	Quality Control Summary Report	Within 45 days after receipt of the last laboratory data report

Note: The project schedule is continually being updated and submitted to the USACE; please refer to the individual submittals of the project schedule for the up-to-date timetable.

QAPP Worksheet #17-1
Sampling Design and Rationale – Offsite Backfill Sampling

As necessary over the duration of the project, backfill material consisting of common fill and standard topsoil will be obtained from offsite sources. Samples of backfill materials will be analyzed to confirm that they are free from chemical contamination as defined in N.J.A.C. 7:26D and NORM as defined in N.J.A.C 7:28-12.

Offsite backfill materials will be acquired from local, USACE-approved, borrow sources. The backfill material will meet the requirements described in Section 02320 of the project specification and the requirements defined in the NJDEP Soil Cleanup Criteria. The fill material will be sampled and analyzed to verify that the soil is clean for the intended use. Documentation certifying that all criteria have been met for offsite backfill will be forwarded to the USACE prior to bringing any material to the site.

A minimum of one sample per every 5,000yd^3 of backfill material, and no less than one sample per borrow area will be collected. Additional samples may be collected and analyzed as requested by the USACE. The sample location is determined when the facility point of contact identifies which pile of backfill material will be used for the site.

Backfill material samples will be analyzed for VOCs, SVOCs, pesticides, PCBs, metals, cyanide, and radiological parameters. The results of these analyses will be compared to the NJDEP RDCSRS and N.J.A.C. 7:28-12, Table 1A (see Worksheets #15-1 through #15-6). Sample results exceeding criteria will be considered unacceptable as topsoil or backfill.

Backfill samples will be analyzed on a five day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this UFP-QAPP. Field duplicates will not be collected. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

VOC samples will be collected using five-gram En-Core™ samplers and the spade and trowel method will be used for all other parameters. With the spade and trowel method, the top layer of soil to desired sample depth is removed with a dedicated, pre-cleaned spade. A dedicated, pre-cleaned trowel is then used to collect samples from the desired depth (i.e., at a minimum from the top six inches of soil). VOC samples will be collected as grab samples and samples for all other parameters will be collected as five-point composites. Soil samples for laboratory analysis will be collected in the appropriate containers identified in Worksheet #19. The order of collection for analytical parameters will be organics and then metals. To maintain integrity of the collected samples, preservation techniques should include refrigeration and protection from light, and the sample jars should be closed immediately after filling and placed on ice.

Samples for VOC analysis will be collected as follows:

- Gloves will be donned immediately prior to sampling and a pair of new gloves will be worn each time a different location is sampled.
- The sample collection process should be completed in a minimal amount of time with the least amount of disruption as possible. Rough trimming of the sampling location surface layer should be considered if the material may have already lost VOCs (e.g., been exposed for more than a few minutes) or if other waste, different soil strata, or vegetation may have contaminated it. Surface layers can be removed by scraping the surface using a clean spade.
- Insert the clean coring tool into a fresh surface for sample collection. Take care not to trap air behind the sample. An undisturbed sample is collected by pushing the barrel of the coring tool into a freshly exposed surface and removing the corer once it is filled.
- The exterior of the barrel should be quickly wiped with a clean disposable towel to ensure a tight seal and the cap snapped on the open end.

Samples for all other analyses will be collected as follows:

- Gloves will be donned immediately prior to sampling and a pair of new gloves will be worn each time a different location is sampled.
- Using a disposable sample trowel, collect sufficient sample into a dedicated, disposable aluminum container from each of the five predetermined sample locations. The container must be large enough to hold more than the required volume and to allow proper mixing without spillage.
- Homogenization will be conducted using a decontaminated stainless steel spoon or spatula. The soil should be scraped from the sides, corners, and bottom, rolled into the middle of the bowl, and mixed. The soil should then be quartered (i.e., divided into four sections) and moved to the sides of the bowl. Each quarter should then be mixed individually, and then rolled to the center of the bowl and mixed with the entire sample again. These steps of quartering the sample, mixing individually, and then mixing the entire sample again should be repeated at least twice. The goal of the homogenization is to achieve a consistent physical appearance over the entire soil sample.
- Transfer the sample into laboratory cleaned sample jars using a clean decontaminated stainless steel spoon or spatula.
- Any leftover sample material will be placed back into the borrow area.

QAPP Worksheet #17-2
Sampling Design and Rationale – Solid Waste Characterization Sampling

As part of the site remediation, soils removed during remediation activities will be disposed of at an offsite disposal facility. Samples will be collected in-situ, prior to excavation activities, for waste characterization and disposal facility approval. The waste characterization samples will be analyzed by the subcontracted laboratory and the results will be sent to the offsite disposal facility for waste shipment approval. Waste characterization sample results will be compared against the disposal facility requirements.

Solid waste characterization samples will be analyzed for TCLP parameters (VOCs, SVOCs, pesticides, herbicides, and metals), total PCBs, RCRA characteristics (corrosivity, ignitability, reactive cyanide, and reactive sulfide), and Pennsylvania Form U parameters (oil and grease, ammonia-nitrogen, COD, total volatile solids, total solids, and free liquids). The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements; as of this writing, the offsite disposal facility has not been contracted and the specific requirements may vary. In addition to the full characterization samples, if deemed necessary by the Waste Disposal Coordinator or if required by the offsite disposal facility, additional samples may be collected and analyzed for only PCBs. All solid waste characterization samples will be shipped to the laboratory for analysis on a 5 day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this QAPP. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

Solid waste characterization samples will be collected in-situ prior to the initiation of excavation activities. Maps of the excavation areas and predetermined depths of excavation for the three remediation areas are included in Appendix 1. Large plots of the figures included in Appendix 1 are available onsite and should be referenced for all field activities. One full waste characterization sample will be collected from each proposed excavation area, with one sample collected for every 500yd^3 of excavated material in the larger property groupings. With the exception of TCLP VOC samples, the samples will be collected as five-point composites. The compositing procedure is designed to provide a representative sample of the waste material by combining materials collected from five discrete locations in the subsection of the excavation area. In order to prevent excess volatilization, TCLP VOC samples will be collected as a grab sample from one of the sample locations. Samples will be collected from the midpoint depth of the predetermined vertical limit of excavation (see Figures 1A, 2A, and 3A included in Appendix 1). It is anticipated that soil samples will be collected from each location using an auger or other soil coring device following the procedures included in the NJDEP Field Sampling Procedures Manual (NJDEP, 2005). The samples will be collected as follows:

- Gloves will be donned immediately prior to sampling and a clean pair of new disposable gloves will be worn each time a different location is sampled.
- Remove unnecessary twigs, rocks, and other non-soil materials from selected sampling point.
- Begin turning the auger with a clockwise motion and continue until the desired sampling depth is obtained.
- Use a second auger to collect the sample. Discard one-half inch of material in the top portion of the auger due to cave-in.
- Place the sample for VOC analysis directly into the required container, taking care to fill the container completely to limit headspace.
- Place the sample into a clean decontaminated stainless steel bowl to be homogenized. The bowl must be large enough to hold more that the required sample volume and to allow proper mixing without spillage.
- Collect the samples from the other four location using the auger as described above, placing each aliquot in the same stainless steel bowl.
- Homogenization will be conducted using a decontaminated stainless steel spoon or spatula. The soil should be scraped from the sides, corners, and bottom, rolled into the middle of the bowl, and

mixed. The soil should then be quartered (i.e., divided into four sections) and moved to the sides of the bowl. Each quarter should then be mixed individually, and then rolled to the center of the bowl and mixed with the entire sample again. These steps of quartering the sample, mixing individually, and then mixing the entire sample again should be repeated at least twice. The goal of the homogenization is to achieve a consistent physical appearance over the entire soil sample.

- Transfer the sample into laboratory cleaned sample jars using a clean decontaminated stainless steel spoon or spatula.
- Any leftover sample material will be placed back into the excavation area.

QAPP Worksheet #17-3
Sampling Design and Rationale – Liquid Waste Characterization Sampling

Liquid wastes generated during site activities, if any, will be containerized in an aboveground storage tank. At a minimum, one sample will be collected from each storage tank to determine the waste management approach. The sample results and the completed waste profile will be sent to the offsite disposal facility for waste shipment approval.

Liquid waste characterization samples will be analyzed for TCLP parameters (VOCs, SVOCs, pesticides, herbicides, and metals), total PCBs, and RCRA characteristics (corrosivity, ignitability, reactive cyanide, and reactive sulfide). Additional analytes may be required by the offsite disposal facility; the Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements. The samples will be shipped to the laboratory for analysis on a 5 day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this QAPP. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

Samples will be collected using dedicated, disposal polyvinyl chloride or Teflon bailers. The following sample procedure is consistent with NJDEP sampling instructions (NJDEP, 2005):

- Prepare the work area by placing plastic sheeting on the ground to avoid cross-contamination.
- Attach the bailer to cable or line for lowering. Polyethylene or nylon rope is recommended.
- Lower the bailer slowly until it contacts the water surface.
- Allow the bailer to sink and fill.
- Slowly raise the bailer to the surface. Do not allow the bailer line or bailer to contact the ground surface.
- Fill sample bottles by tipping bailer to allow slow discharge from the top to flow gently down the side of the sample bottle with minimal turbulence. If a bottom drain is present on the bailer, achieve a slow steady flow.
- Repeat as necessary to acquire sufficient volume to fill all sample containers.

QAPP Worksheet #18
Sampling Locations and Methods/SOP Requirements Table

Sampling Location/AOC	Matrix	Depth	Analytical Group	Concentration Level	Number of Samples (identify field duplicates)	Sampling SOP Reference	Rationale for Sampling Location
Offsite backfill and topsoil	Soil	At least 6 inches below surface	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	Approximately 2 samples (i.e., 1 backfill sample and 1 topsoil sample) No field duplicate samples required	Worksheet #17-1	Verify topsoil and backfill from offsite sources do not contain contaminant levels that are hazardous to human health or the environment
Waste characterization[1]	Soil	Midpoint[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides PCBs TCLP Metals Cyanide Reactivity Sulfide Reactivity Oil and Grease Ammonia-Nitrogen COD Total Volatile Solids pH Ignitability Total Solids Free Liquids	Low to High	Approximately 7 samples (i.e., 2 samples from Property 108/129/301/303; 1 sample from Property 116/302; 4 samples from Property 128/304/305) No field duplicate samples required	Worksheet #17-2	Characterize waste for proper disposal
Waste characterization	Soil	Midpoint[2]	PCBs	Low to High	Determined in the field and/or as requested by the offsite disposal facility No field duplicate samples required	Worksheet #17-2	Characterize waste for proper disposal

Sampling Location/AOC	Matrix	Depth	Analytical Group	Concentration Level	Number of Samples (identify field duplicates)	Sampling SOP Reference	Rationale for Sampling Location
Waste characterization[1]	Aqueous	NA	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides PCBs TCLP Metals Cyanide Reactivity Sulfide Reactivity pH Ignitability	Low to High	Determined in the field based on the amount of wastewater generated No field duplicate samples required	Worksheet #17-3	Characterize waste for proper disposal

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.
[2] Samples will be collected at the midpoint between the ground surface and the limit of excavation. Refer to the excavation plan drawings for each property group included in the Appendix 1.

QAPP Worksheet #19
Analytical SOP Requirements Table

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Offsite backfill	VOCs SVOCs Pesticide PCBs Metals Cyanide Radiological Parameters	Trace to Low	SW846 8260B SW846 8270D SW846 8081B SW846 8082A SW846 6010C/7471B SW846 9012B HASL-300 or equivalent gamma spectroscopy method	200 grams for extractable organics and metals; 2 different 5 gram aliquots for VOCs Gamma spectroscopy: fill Marinelli container (sample weight will vary based on density of material)	32oz. glass container for extractable organics and metals; 5 gram EnCore™ samplers and 4oz. glass container for VOCs; 32oz. glass containers for gamma spectroscopy	4ºC±2ºC; minimize headspace; none required for gamma spectroscopy	**VOCs:** Analyze within 14 days from date of collection **SVOCs, Pesticides, PCBs:** 14 days from date of collection to extraction and 40 days from extraction to analysis **Metals:** 180 days from date of collection to analysis; 28 days from date of collection to analysis for mercury **Cyanide:** 14 days from date of collection to analysis **Gamma Spectroscopy:** 180 days from date of collection to analysis

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Solid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide Oil and Grease Ammonia-nitrogen COD Total Volatile Solids Total Solids Free Liquids	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2 USEPA 1664A SM4500NH3 D SM5220D SM2540G SM2540B SW846 9095B	200 grams for extractable organics and metals; 25 grams for VOCs; 100 grams for RCRA characteristics; 400 grams for Pennsylvania Form U	32 oz. glass container for extractable organics and metals; 4oz. glass container for VOCs; 32oz. glass container for RCRA characteristics and Pennsylvania Form U	4ºC±2ºC; **VOCs:** zero headspace	**TCLP extraction** within 14 days for organics and within 180 days for metals (except mercury within 28 days); **Analysis of TCLP extracts:** *VOCs:* analysis within 14 days; *Extractable Organics (SVOCs, pesticides, herbicides):* extraction of leachate within 7 days and analysis within 40 days of extraction; *Metals:* analysis within 180 days (except mercury within 28 days); *Oil & Grease, Ammonia, Chemical Oxygen Demand:* analysis within 28 days **PCBs:** 14 days from date of collection to extraction and 40 days from extraction to analysis **pH, Ignitability, Reactive Sulfide, Total Volatile Solids, Total Solids:** 7 days from date of collection to analysis **Reactive Cyanide:** 14 days from date of collection to analysis **Oil & Grease, COD, Ammonia-Nitrogen:** 28 days from date of collection to analysis
Solid Waste Characterization	PCBs	Low to High	SW846 8082A	200 grams for extractable organics and	4oz. glass container	4ºC±2ºC	14 days from date of collection to extraction and 40 days from extraction to analysis

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Liquid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2	40mL for TCLP VOCs; 1L each for TCLP SVOCs, TCLP pesticides, TCLP herbicides, and PCBs; 500mL for TCLP metals; 100mL for pH; 250mL for ignitability; 1L for reactive cyanide; 500mL for reactive sulfide	2-40mL glass vial with Septa lined cap; 1L amber glass bottle each for TCLP SVOCs, TCLP pesticides, TCLP herbicides, and PCBs; 500mL plastic bottle for TCLP metals; 100mL plastic bottle for pH; 250mL glass bottle with Septa lined cap for ignitability; 1L plastic bottle for reactive cyanide; 500mL plastic bottle for reactive sulfide	4ºC±2ºC; **TCLP VOCs:** zero headspace/HCl to pH<2; **TCLP metals:** HNO_3 to pH<2; **reactive cyanide:** ascorbic NaOH to pH>12; **reactive sulfide:** zinc acetate NaOH to pH>9	**TCLP extraction** within 7 days for organics and within 180 days for metals (except mercury within 28 days); **Analysis of TCLP extracts:** *VOCs:* analysis within 14 days; *Extractable Organics (SVOCs, pesticides, herbicides):* extraction of leachate within 7 days and analysis within 40 days of extraction; *Metals:* analysis within 180 days (except mercury within 28 days) **PCBs:** 7 days from date of collection to extraction and 40 days from extraction to analysis **pH:** Immediately **Ignitability, Reactive Sulfide:** 7 days from date of collection to analysis **Reactive Cyanide:** 14 days from date of collection to analysis

[1] In some cases, multiple analyses can be taken from the same jar. Consult the laboratory for further instructions.
[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #20
Field Quality Control Sample Summary Table

Matrix	Analytical Group	Conc. Level	Analytical and Preparation SOP Reference	No. of Sampling Locations	No. of Field Duplicate Pairs	No. of MS/MSD	No. of Field Blanks	No. of Equip. Blanks	No. of Trip Blank Samples	Total No. of Samples to Lab
Offsite backfill and topsoil	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	SW846 8260B SW846 8270D SW846 8081B SW846 8082A SW846 6010C/7471B SW846 9012B HASL-300 or equivalent gamma spectroscopy method	One sample per 5,000yd^3 of backfill material and not less than one sample per borrow area for a total of approximately 2 samples.	0	0	0	0	0	2
Solid waste characterization[1]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide Oil and Grease Ammonia-nitrogen COD Total Volatile Solids Total Solids Free Liquids	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2 USEPA 1664A SM4500NH3 D SM5220D SM2540G SM2540B SW846 9095B	Approximately 7 samples (i.e., 2 samples from Property 108/129/301/303; 1 sample from Property 116/302; 4 samples from Property 128/304/305)	0	0	0	0	0	7
Solid waste characterization	PCBs	Low to High	SW846 8082A	Determined in the field and/or as requested by the offsite disposal facility	0	0	0	0	0	TBD

Matrix	Analytical Group	Conc. Level	Analytical and Preparation SOP Reference	No. of Sampling Locations	No. of Field Duplicate Pairs	No. of MS/MSD	No. of Field Blanks	No. of Equip. Blanks	No. of Trip Blank Samples	Total No. of Samples to Lab
Liquid waste characterization[1]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	SW846 8260B SW846 8270D SW846 8081B SW846 8151A SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2	Determined in the field based on the amount of wastewater generated	0	0	0	0	0	TBD

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #21
Project Sampling SOP References Table

Reference Number	Title, Revision Date, and/or Number	Originating Organization	Equipment Type	Modified for Project Work? (Y/N)	Comments
NA	NJDEP Field Sampling Procedures Manual, August 2005	NJDEP	Sample collection and processing equipment	No	To be used by the field team as a guide to collecting samples. Sampling methodology included in Worksheet #17 is based on the procedures included in this manual. Specific sections to reference include 5.2.1.1 (liquid waste characterization), 6.2.7 (VOCs in soil), 6.2.8 (soil homogenization), and 6.6 (waste piles).

QAPP Worksheet #22
Field Equipment Calibration, Maintenance, Testing, and Inspection Table

Field Equipment	Calibration Activity	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Responsible Person	SOP Reference
No field sampling equipment is expected to be used during remediation activities.									

QAPP Worksheet #23
Analytical SOP References Table

Reference Number	Title, Revision Date, and/or Number	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work?
SW846 8081B	Organochlorine Pesticides by Gas Chromatography, Revision 2, February 2007	Definitive	Pesticides	Gas Chromatography with Electron Capture Detector (GC-ECD)	Spectrum	No
SW846 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography, Revision 1, February 2007	Definitive	PCBs	GC-ECD	Spectrum	No
SW846 8260B	Volatile Organics by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 3, February 2007	Definitive	VOCs	Gas Chromatography/Mass Spectroscopy (GC/MS)	Spectrum	No
SW846 8270D	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007	Definitive	SVOCs	GC/MS	Spectrum	No
SW846 6010C	Inductively Coupled Plasma-Atomic Emission Spectrometry, Revision 3, February 2007	Definitive	Metals	Inductively Coupled Plasma (ICP)-Atomic Emission Spectrometry (AES)	Spectrum	No
SW846 7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique), Revision 1, September 1994	Definitive	Mercury	Cold Vapor Atomic Absorption (CVAA)	Spectrum	No
SW846 7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique), Revision 2, February 2007	Definitive	Mercury	CVAA	Spectrum	No
SW846 9012B	Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation), Revision 2, November 2004	Definitive	Cyanide	Distillation, Colorimetric	Spectrum	No
SW846 1010A	Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester, Revision 1, November 2004	Definitive	Ignitability	Pensky-Martens	Spectrum	No
SW846 8151A	Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization, Revision 1, December 1996	Definitive	Herbicides	GC-ECD	Spectrum	No

Reference Number	Title, Revision Date, and/or Number	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work?
SW846 Section 7.3.3.2	Reactive Sulfide Based on Section 7.3.3.2 of SW846	Definitive	Sulfide	Distillation, Redox	Spectrum	No
SW846 Section 7.3.4.2	Reactive Sulfide Based on Section 7.3.4.2 of SW846	Definitive	Cyanide	Distillation, Colorimeteric	Spectrum	No
SM2540G	Total, Fixed, and Volatile Solids in Solid and Semisolid Samples	Definitive	Total Volatile Solids	Analytical Balance	Spectrum	No
SW846 9045D	Soil and Waste pH, Revision 4, November 2004	Definitive	pH	pH Meter	Spectrum	No
SW846 9040C	pH by Electrometric Measurement, Revision 3, November 2004	Definitive	pH	pH Meter	Spectrum	No
HASL-300	Environmental Measurements Laboratory, Procedures Manual, 28th Edition	Definitive	Radiological Parameters	Gamma Spectrometer	Spectrum	No
USEPA 1664A	n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Treated n-Hexane Extractable Material (SGT-HEM; Non-Polar Material) by Extraction and Gravimetry	Definitive	Oil and Grease	Analytical Balance	Spectrum	No
SM5220D	The Determination of Chemical Oxygen Demand by Semi-Automated Colorimetry	Definitive	COD	Spectrophotometer	Spectrum	No
SM2540B	Total Residue (Gravimetric, Dried at 103-105 deg C)	Definitive	Total Solids	Analytical Balance	Spectrum	No
SM4500NH3 D	NH_3 Nitrogen, Ammonia	Definitive	Ammonia-Nitrogen	Ammonia Electrode	Spectrum	No
SW846 9095B	Paint Filter Liquid Test, Revision 2, November 2004	Definitive	Free Liquids	Paint Filter	Spectrum	No

QAPP Worksheet #24
Analytical Instrument Calibration Table

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/MS (VOC)	Bromofluorobenzene (BFB) tuning	Prior to initial calibration and calibration verification	Refer to criteria listed in the SOP	Retune instrument and verify	Laboratory analyst	SW846 8260B
	Initial calibration (minimum five points)	Prior to sample analysis or when calibration verification fails	% relative standard deviation (RSD) must be ≤15% for each compound. If %RSD >15%, determine best-fit curve: Linear regression correlation coefficient ≥0.995 or quadratic regression coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	
	System performance check	Once after each initial calibration and calibration verification	Response factor ≥0.10 for chloromethane, 1,1-dichloroethane, and bromoform; ≥0.30 for chlorobenzene and 1,1,2,2-tetrachloroethane	Correct the problem and repeat initial calibration.	Laboratory analyst	
	Continuing Calibration Verification (CCV)	At the start of each analytical sequence and every 12 hours thereafter	Response factor ≥0.10 for chloromethane, 1,1-dichloroethane, and bromoform; ≥0.30 for chlorobenzene and 1,1,2,2-tetrachloroethane. All other analytes within ±20% of expected value.	Correct the problem, then recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/MS (SVOC)	Decafluorotriphenylphosphine (DFTPP) tuning	Prior to initial calibration and calibration verification (every 12 hours)	Refer to criteria listed in the SOP	Retune instrument and verify	Laboratory analyst	SW846 8270D
	Initial calibration (minimum five points)	Prior to sample analysis or when calibration verification fails	%RSD must be ≤15% for each compound. If %RSD >15%, determine best-fit curve: Linear regression correlation coefficient ≥0.995 or quadratic regression coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	
	System performance check	Once after each initial calibration and calibration verification	Response factor ≥0.05 for N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol	Correct the problem and repeat initial calibration.	Laboratory analyst	
	CCV	At the start of each analytical sequence and every 12 hours thereafter	Response factor ≥0.05 for N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol. All other analytes within ±20% of expected value.	Correct the problem, then recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/ECD (pesticides, PCBs, herbicides)	Multipoint initial calibration for single response pesticides; multipoint calibration for multi-peak pesticides; multipoint calibration for aroclors 1016 and 1260 only	Whenever major instrument maintenance or modification is performed, or when calibration verification fails	To use average relative response factor (RRF) for quantitation of any analyte, %RSD must be ≤15%; otherwise use first order linear regression curve with correlation coefficient ≥0.995 or quadratic regression with coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	SW846 8081B, SW846 8082A, SW846 8151A
	Initial calibration verification (ICV)	Once for each multipoint initial calibration	All analytes within ±20% of expected value	Correct the problem, then repeat the initial calibration and reanalyze all samples	Laboratory analyst	
	CCV	At the start of each analytical sequence, after 12 hours or 10 samples whichever is more frequent, and at the end of the sequence	All analytes within ±20% of expected value; either column may be used to meet the calibration criteria, however, the analytes must be quantified from then column that met the criteria	Correct the problem, then repeat initial calibration and reanalyze all samples.	Laboratory analyst	
ICP-AES (metals)	Initial calibration	Before sample analysis, every 24 hours, whenever modifications are made to the system, or when continuing calibration verification fails	Correlation coefficient must be ≥0.997	Correct problem and repeat initial calibration.	Laboratory analyst	SW846 6010C

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	ICV	Once after each initial calibration, prior to sample analysis	Recovery must be 95-105%	Reanalyze, if problem persists, terminate analysis, correct problem, recalibrate, and re-verify the calibration	Laboratory analyst	
	QC check standard	Once after each initial calibration, prior to sample analysis	Recovery must be 90-110%	Terminate analysis, correct problem, recalibrate, and re-verify the calibration	Laboratory analyst	
	Initial calibration blank (ICB)	Immediately after analysis of ICV	Absolute value of blank result <3-sigma the mean calibration blank.	Terminate analysis, correct the problem, recalibrate, and re-verify the calibration	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	CCV	After every 10 samples and at the end of the analysis sequence	Recovery must be 90-110%	Terminate analysis, correct the problem, recalibrate and re-verify the calibration; reanalyze all samples and QC checks run since last acceptable CCV	Laboratory analyst	
	Continuing calibration blank (CCB)	Immediately after analysis of the CCV	Absolute value of blank must be <RL	Terminate analysis, correct problem, recalibrate and re-verify the calibration; reanalyze all samples and QC checks run since the last acceptable CCB	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
CVAA (mercury)	Initial calibration	Before sample analysis, every 24 hours, whenever modifications are made to the system, or when continuing calibration verification fails	Correlation coefficient must be ≥0.995	Correct problem and repeat initial calibration	Laboratory analyst	SW846 7471B, SW846 7470A
	QC check standard	Immediately following each initial calibration	All analytes within ±10% of expected value	Check QC solution; recalibrate and reanalyze; if results are still not acceptable, re-digest and reanalyze samples	Laboratory analyst	
	CCV	After every 10 samples and at the end of the analysis sequence	All analytes within ±20% of expected value	Recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	
Cyanide	Initial multipoint calibration (minimum eight standards and a calibration blank)	Annually or if analysis of continuing calibration or QC check standards do not meet criteria	Correlation coefficient ≥0.995 for linear regression	Correct problem then repeat initial calibration.	Laboratory analyst	SW846 9012, SW 846 Section 7.3.4.2

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Distilled standards (one high and one low)	Once per initial calibration	Value within ±10% of true value	Correct problem then repeat distilled standard	Laboratory analyst	
	CCV	Daily prior to sample analysis	Value within ±15% of true value	Prepare new calibration verification standard; recalibrate if problem cannot be located	Laboratory analyst	
Gamma Spectroscopy	Energy and efficiency calibration	After initial installation, annually, and following system maintenance that could affect the calibration	Energy calibration: full width at half maximum (FWHM) ±5% Efficiency calibration: (1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat calibration	Laboratory analyst	HASL 300 (or equivalent gamma spectroscopy method)

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Energy and efficiency check	Daily	Energy check: FWHM ±5% Efficiency check: (1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat calibration	Laboratory analyst	
	Background check	Daily	(1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat background check	Laboratory analyst	
Pensky-Martens	Determine flashpoint of xylenes	Once per 10 samples analyzed	Value of 81ºF (±2ºF)	Check apparatus for proper operation before analyzing samples	Laboratory analyst	SW846 1010
pH Meter	Initial calibration (minimum 2 points)	Daily	Slope of curve must be 100±5%	Correct problem and repeat calibration	Laboratory analyst	SW846 9045D

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Calibration verification	After initial calibration, after every 10 samples analyzed, and at the end of sample measurement	pH 7 buffer solution must exhibit pH of 7.00±0.05	Repeat initial calibration and reanalyze all associated samples	Laboratory analyst	

QAPP Worksheet #25
Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table

All laboratory analytical equipment will undergo maintenance and testing procedures in accordance with the laboratory SOPs. Laboratory SOPs must be compliant with minimum method requirements. Some typical maintenance and testing activities are included in the following table.

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
GC/MS; GC-ECD	Daily	Purge traps are baked out; changes of the traps are logged.	Laboratory analyst	SW846 8260B SW846 8270D SW846 8081B SW846 8082A
		Columns are baked out.		
		Volume of gas cylinders is checked.		
	As Required	Teflon ferrules are replaced.		
		Injection port liners are cleaned or replaced.		
		GC septa are changed after 50 injections.		
		Detectors are baked out.		
	Quarterly	Instrument electronics are visually inspected and cleaned.		
		Detectors are cleaned as recommended by the manufacturer or more frequently as needed.		
	Annually	Electron capture detectors are wipe tested.		
		Preventative maintenance performed by manufacturer as per service contract terms.	Manufacturer representative	
ICP-AES	Daily	Verify room temperature and humidity maintained to manufacturer's specifications.	Laboratory analyst	SW846 6010C
		Check argon tank pressure and verify that spare tank is available.		
		Inspect pump tubing before operation and every few hours.		
		Check that nebulizer is not clogged and that capillary tubing is clean and in good condition.		
		Inspect torch glassware and aerosol injector tube.		
		Be sure drain tube is firmly attached to spray chamber and drain bottle. Verify that drain bottle is not full and that there is liquid in the loop.		
	As Required	Check tension on peristaltic pump tubing.		

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
		Check nebulizer spray pattern with deionized water and clean spray tips if necessary.		
		Clean torch components with water or solvents. Replace cracked or work o-rings.		
		Inspect air filter and clean with soap and water if necessary.		
		Check performance by running Manganese Background Equivalent Concentration or Coefficient of Variation tests.		
CVAA	Daily	Clean and rinse all glassware with 20% nitric acid and 10% hydrochloric acid.	Laboratory analyst	SW846 7471B SW846 7470A
		Check tubing for contamination and wear.		
		Regenerate drying tube.		
	As Required	Rinse stannous chloride and pump tubing with 10% 10N sodium hydroxide and deionized water.		
		Wipe pump rollers with isopropyl alcohol.		
		Replace lamp and clean optical cell.		
Cyanide Analysis Distillation System	Daily	Clean glassware prior to reuse	Laboratory analyst	SW846 9012B SW 846 Section 7.3.4.2
		Rinse tubing connecting distillation heads and dispersion tube assemblies with reagent water		
	As Required	Replace tubing when it appears soiled		
	Semi-Annually	Replace tubing		
		Inspect spectrophotometer	Manufacturer representative	
	As Required	Change internal filling solution		
Gamma Spectroscopy System	Daily	Background, calibration, and LCS checks	Laboratory Supervisor	HASL-300 (or equivalent gamma spectroscopy method)
	Monthly	System background check		
	Annually	Efficiency and energy calibrations		
	Semi-Annually	Physical inspection		
		Test point voltage check	Manufacturer representative	
		Certified weight set response check		
		Re-generate column efficiency		
Pensky-Martens	Daily	Verify room temperature and humidity maintained to manufacturer's specifications.	Laboratory analyst	SW846 1010
		Wash flash cup with soap and water after each analysis.		

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
pH Meter	Daily	Clean glassware prior to reuse	Laboratory analyst	SW846 9045D
		Store electrode in pH 7 buffer solution or storage solution		
	As Required	Change internal filling solution		
		Re-generate column efficiency		

QAPP Worksheet #26
Sample Handling System

SAMPLE COLLECTION, PACKAGING, AND SHIPMENT
Sample Collection (Personnel/Organization): Sevenson field team
Sample Packaging (Personnel/Organization): Sevenson field team
Coordination of Shipment (Personnel/Organization): Sevenson field team
Type of Shipment/Carrier: Federal Express or United Parcel Service (UPS) for Overnight Delivery or courier to the laboratory
SAMPLE RECEIPT AND ANALYSIS
Sample Receipt (Personnel/Organization): Subcontract laboratory personnel
Sample Custody and Storage (Personnel/Organization): Subcontract laboratory personnel
Sample Preparation (Personnel/Organization): Subcontract laboratory personnel
Sample Determinative Analysis (Personnel/Organization): Subcontract laboratory personnel
SAMPLE ARCHIVING
Field Sample Storage (No. of days from sample collection): Samples will not be stored in the field, but will be shipped within 24 hours of collection. If in an emergency they are stored in the field, they will be kept in a cooler or transferred to a refrigerator kept at 4ºC. Laboratory sample custodian will store samples at the laboratory for 30 days after the final report has been submitted to Sevenson.
Sample Extract/Digestate Storage (No. of days from extraction/digestion): Sample extraction and digestion must be conducted according to the requirements given in Worksheet #19. Laboratory analytical technicians will store all extracts/digestates for 30 days after the final report has been submitted to Sevenson.
Biological Sample Storage (No. of days from sample collection): Not applicable
SAMPLE DISPOSAL
Personnel/Organization: Subcontract laboratory personnel
Number of Days from Analysis: Samples may not be disposed of prior to 30 days after final report has been submitted to Sevenson.

QAPP Worksheet #27
Sample Custody Requirements

Proper sample handling, shipment, and maintenance of a chain of custody (COC) are key components of building the documentation and support for data that can be used to make project decisions. It is important that sample handling and sample COC requirements are performed completely, accurately, and consistently. A COC record establishes the documentation necessary to trace sample possession from time of collection through sample analysis and disposition.

A sample is considered to be in someone's custody if it:

- Is in his/her possession.
- Is in his/her view, after being in his/her possession.
- Is in his/her possession and has been placed in a secure area.
- Is in a designated secure area.

Field Logbooks/Documentation

The sequentially numbered field logbook (i.e., OU1 Soil Remediation #1, -#2, etc.) will provide the means of recording data collection activities performed. As such, logbook entries will be described in as much detail as possible so that particular site activities could be reconstructed without reliance on memory.

Field logbooks will be bound logbooks, field survey books, or notebooks. Logbooks will be assigned to field personnel, but will be stored in the document control center when not in use.

A project-specific document number will be used to identify each logbook. The title page of each logbook will contain the following information:

- Person to whom the logbook is assigned.
- Logbook number.
- Project name.
- Project start date.
- Project end date.

Entries into the logbook will contain a variety of information. The beginning of each entry will include: the date, start time, weather conditions, names of all sampling team members present, level of personal protection being used, and the signature of the person making the entry. The names of visitors to the site (including additional field sampling or investigative team personnel), and the purpose of their visit will also be recorded in the field logbook.

Measurements made and samples collected will be recorded in the field logbook. All entries will be made in ink and no erasures will be made. If an incorrect entry is made, the incorrect information will be crossed out with a single strike mark and initialed. Whenever a sample is collected or a measurement is made, a detailed description of the location of the station will be recorded in the logbook. The number of photographs taken at the station, if any, will also be noted. The logbook will identify all equipment used to make measurements.

Samples will be collected in accordance with the sampling procedures documented in Worksheet #17. The equipment used to collect samples will be noted, along with the time of sampling, sample description, depth of sample collection, volume, and the number of sample containers. The corresponding sample identification number will be prominently listed.

Field Procedures

The field sampler will be personally responsible for the care and custody of the samples until the samples are transferred or properly dispatched. As few people as possible will handle the samples. The CQCSM will review all field activities to determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

Sample Numbering System

A unique sample numbering scheme will be used to identify each sample designated for laboratory analysis. Sample identification numbers will be used on all sample labels, field data sheets or logbooks, chain of custody records, and all other applicable documentation used during the project. The sample identification scheme to be used for the project is as follows:

Offsite backfill and topsoil samples will be labeled: CD-BF-xx or CD-TS-xx

- CD-BF/CD-TS — Project site and sample type (Cornell-Dubilier backfill sample or Cornell-Dubilier topsoil sample)
- xx — Sequential sample number

Solid waste characterization samples will be labeled: CD-WC-xx

- CD-WC — Project site and sample type (Cornell-Dubilier waste characterization sample)
- xx — Sequential sample number

Wastewater characterization samples will be labeled: CD-WW-xx

- CD-WW — Project site sand sample type (Cornell-Dubilier wastewater sample)
- xx — Sequential sample number

Sample Labeling

Self-adhesive labels will be affixed to each sample container. The sample label will be completed in indelible ink and will include the following information:

- Project name
- Sample ID number
- Date and time of sample collection
- Sampler's initials
- Sample type (i.e., matrix)
- Preservative used, if any
- Analyses requested

Sample labels will be affixed to the sample containers and covered with clear packaging tape.

Chain of Custody Procedures

The COC form serves as an official communication to the laboratory detailing the particular analyses required for each sample. The COC record will accompany the samples from the time of sampling through all transfers of custody. The sample collector will complete a COC record to accompany each delivery container and will be responsible for shipping samples to the laboratory.

An example COC form is included in Appendix 5. The COC form and sample shipment documentation will be faxed or e-mailed to the laboratory when samples are shipped. The following information is typically recorded on manual COC forms:

- Project name and/or project number

- Signature of field sampler
- Field sample identification number
- Date and time of sample collection
- Grab or composite sample designation
- Sample matrix
- Analyses required
- Preservation technique
- Signatures and dates for transfer of custody
- Air express/shipper's bill of lading identification number

Lines not used on the COC record will be crossed out. A second member of the field sampling team will review the completed COC record to assure that required information is not omitted and that unused lines are crossed out. The original signature copy of the COC record will be enclosed in a plastic bag and secured to the inside of the cooler lid. A copy of the COC record will be retained for project files.

Packaging and Shipping Procedures

As an aid to field personnel and as part of the site QC inspections, Sevenson Checklist Number 007, "Task Specific QC Checklist – Packing, Storing, and Shipment of Samples" and Sevenson Checklist Number 010, "Task Specific Checklist – Sample Cooler Shipment" are included in Appendix 5. All samples will be packaged and labeled for shipment in compliance with current regulations. All samples should be shipped to the project laboratory within 24 hours of sample collection via overnight courier service to ensure timely receipt of the samples by the laboratory. The shipment of samples on Friday is discouraged unless it is absolutely necessary and the laboratory has assured that personnel will be present to receive the shipment on Saturday and implement any necessary processing within the analytical holding times.

Samples should be prepared for shipment as follows:

- Samples will immediately be placed in a cooler filled with ice for temporary storage prior to shipment to the laboratory. Sample labels are placed on samples immediately after sample collection.
- Secure the lid of the sample jar tightly. Wrap the sample jar with bubble wrap. Place each sample jar in a separate ziplock-style plastic bag and seal.
- Only metal or plastic ice chests will be used for shipping samples. Tape shut any drain plugs on both the inside and outside of the cooler. Place a new, clean garbage bag inside the cooler as a secondary liner.
- Place bubble wrap or other suitable, waterproof packaging material between each sample bag to take up any void space in the cooler and to prevent the containers from touching. Place a temperature blank (i.e., a small bottle or jar filled with water) in close proximity to the sample containers.
- Ice used in coolers for shipping to the laboratories will be placed in doubled ziplock-style bags with a minimum amount of air. Use an adequate amount of ice bags such that the samples arrive at the laboratory at 4ºC. Secure the secondary cooler liner with a twist-tie or knot.
- The COC record will be placed inside a ziplock-style bag and taped to the inside of the cooler top.
- The cooler will be closed and taped shut with packing tape or duct tape, and a custody seal will be properly placed across two sides of the cooler lid, preferably one on the front and one on the side.
- The shipping air bill will be securely attached to the exterior of the cooler. Commercial carriers or sample pickup couriers are not required to sign the COC record if it is sealed inside the shipping cooler and the custody seals remain intact. A copy of the bill of lading must be retained in the project files.

Laboratory Chain of Custody Procedures

The laboratory sample custodian will reconcile the information on the COC records with the sample bottles received and sign and date all appropriate receiving documents. The sample custodian will document any anomalies and report these to the laboratory project manager. Anomalies will be resolved with the field sampler or CQCSM. The information will be entered in the Laboratory Information Management System (LIMS) along with the analyses being requested. To ensure traceability of samples while in possession of the laboratory, a method for sample identification that has been documented by the laboratory will be used to assign internal sample numbers. The sample custodian is responsible for seeing that all samples are transferred to the proper analyst or stored in the appropriate secure area. Laboratory personnel are responsible for the care and custody of samples from the time they are received, until the sample is exhausted or returned to the custodian using an internal COC record to track sample movement within the laboratory. When sample analyses and necessary QA checks have been completed in the laboratory, the unused portion of the sample will be disposed of properly. All identifying stickers, data sheets, and laboratory records are retained as part of the documentation. Sample containers and remaining samples are disposed of in compliance with federal, state, and local regulatory requirements.

Final Evidence Field Custody Procedures

The evidence files for the project are maintained at the Sevenson office. The content of the evidence file will include all relevant records, reports, correspondence, logs, field logbooks, laboratory sample preparation and analysis logbooks, data packages, pictures, subcontractor reports, chain of custody records, data review reports, etc. The evidence file will be under custody of the contractor project manager in a locked, secure area. The selected contract laboratory will also retain evidence files of analytical data for a minimum of seven years.

QAPP Worksheet #28-1
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	Metals and Cyanide
Concentration Level	Low
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	SW846 6010C, 7471B, 9012B
Sampler's Name	To Be Determined (TBD)
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Calibration blank	Before beginning a sample run, after every 10 samples, and at the end of the analytical sequence	Per QAPP and laboratory SOP	Correct problem. Re-prep and reanalyze calibration blank. All samples following the last acceptable calibration blank must be reanalyzed.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >LOD
Method Blank	One per preparatory	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
ICS (required for method SW846 6010C only)	The beginning of an analytical run	Per QAPP and laboratory SOP	Terminate analysis; locate and correct problem; reanalyze ICS and all samples	Laboratory analyst	Precision, Accuracy	*ICS-A:* Absolute value of concentration for all non-spiked analytes <LOD. *ICS-AB:* Within ±20% of true value

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. If the MS falls outside of criteria, additional quality control tests are required to evaluate matrix effects.	Laboratory analyst	Accuracy	Recovery: 80-120%
Laboratory Duplicate	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision	RPD ≤20% between sample and sample duplicate
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Recovery: 80-120%
Serial Dilution	One per preparatory batch	Per QAPP and laboratory SOP	*SW846 6010C:* Perform PDS addition *SW846 7471B:* Perform recovery test	Laboratory analyst	Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample
PDS (required for method SW846 6010C only)	When dilution test fails or analyte concentration in all samples <50x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by method of standard additions (MSA) or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 75-125%
Recovery Test (required for method SW846 7471B only)	When dilution test fails or analyte concentration in all samples <25x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 85-115%

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-2
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	VOCs, SVOCs, Pesticides, PCBs
Concentration Level	Trace (VOCs), Low (SVOCs, Pesticides, PCBs)
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	SW846 8260B, 8270D, 8081B, 8082A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
Surrogate Spike	All field and QC samples	Per QAPP and laboratory SOP	Correct problem then reprep and reanalyze all failed samples for the failed surrogates in the associated preparatory batch, if sufficient sample material is available. If obvious chromatographic interference with surrogate is present, reanalysis may not be necessary.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-3
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	Radiological Parameters
Concentration Level	Low
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	HASL-300 (or equivalent gamma spectroscopy method)
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory personnel	Accuracy, Sensitivity	All target compounds ≤RL
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific data quality objectives. Contact the client as to additional measures to be taken.	Laboratory Personnel	Precision, Accuracy	Should meet NAD criteria of ≤3.92
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes if sufficient sample material is available.	Laboratory personnel	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-4
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP Metals (solid waste characterization to also include copper, nickel, and zinc)
Concentration Level	Low to Medium
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 6010C/7470A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Calibration blank	Before beginning a sample run, after every 10 samples, and at the end of the analytical sequence	Per QAPP and laboratory SOP	Correct problem. Re-prep and reanalyze calibration blank. All samples following the last acceptable calibration blank must be reanalyzed.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >LOD
Method Blank	One per preparatory	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
ICS (required for method SW846 6010C only)	The beginning of an analytical run	Per QAPP and laboratory SOP	Terminate analysis; locate and correct problem; reanalyze ICS and all samples	Laboratory analyst	Precision, Accuracy	*ICS-A:* Absolute value of concentration for all non-spiked analytes <LOD. *ICS-AB:* Within ±20% of true value

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. If the MS falls outside of criteria, additional quality control tests are required to evaluate matrix effects.	Laboratory analyst	Accuracy	Recovery: 80-120%
Laboratory Duplicate	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision	RPD ≤20% between sample and sample duplicate
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Recovery: 80-120%
Serial Dilution	One per preparatory batch	Per QAPP and laboratory SOP	*SW846 6010C:* Perform PDS addition *SW846 7470A:* Perform recovery test	Laboratory analyst	Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample
PDS (required for method SW846 6010C only)	When dilution test fails or analyte concentration in all samples <50x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 75-125%
Recovery Test (required for method SW846 7470A only)	When dilution test fails or analyte concentration in all samples <25x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 85-115%

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-5
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, PCBs
Concentration Level	Low to High
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 8260B, 8270D, 8081B, 8151A, 8082A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
Surrogate Spike	All field and QC samples	Per QAPP and laboratory SOP	Correct problem then reprep and reanalyze all failed samples for the failed surrogates in the associated preparatory batch, if sufficient sample material is available. If obvious chromatographic interference with surrogate is present, reanalysis may not be necessary.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-6
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Reactivity (Sulfide and Cyanide)
Concentration Level	Low
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 Sections 7.3.3.2 and 7.3.4.2
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Reanalyze	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-7
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Ignitability
Concentration Level	NA
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 1010
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Laboratory Duplicate	One per batch of 20 samples	Per QAPP and laboratory SOP	Re-prepare and reanalyze	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per batch of 20 samples	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Precision/Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-8
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	pH[1]
Concentration Level	NA
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	SW846 9045D, SW846 9040C
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC
Initial Calibration Verification	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Sensitivity	±0.10 pH unit of the temperature adjusted pH value
Continuing Calibration Verification	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Sensitivity	±0.05 pH unit of the temperature adjusted pH value
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Precision	Must agree within ±0.10 pH units
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] Analysis for solid waste characterization will be performed on both the solid material and the TCLP extract.

QAPP Worksheet #28-9
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Oil and Grease[1]
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	EPA 1664A
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Reanalyze	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] Analysis will be performed on both the solid material and the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-10
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Ammonia-Nitrogen[1]
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM 4500NH3 D
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-11
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	COD[1]
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM5220D
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-12
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Total Volatile Solids
Concentration Level	Low
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM2540G
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-13
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Total Solids[1]
Concentration Level	NA
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SM2540B
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory personnel	Accuracy, Sensitivity	All target compounds ≤RL
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific data quality objectives. Contact the client as to additional measures to be taken.	Laboratory Personnel	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes if sufficient sample material is available.	Laboratory personnel	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

[1] Analysis will be performed on the TCLP extract.
[2] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-13
QC Samples Table

Matrix	Solid Waste Characterization
Analytical Group	Free Liquids
Concentration Level	NA
Sampling SOP	Worksheet #17-2
Analytical Method/ SOP Reference	SW846 9095
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[2]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2ºC

QAPP Worksheet #29
Project Documents and Records

Sample Collection Documents and Records	On-Site Analysis Documents and Records	Off-Site Analysis Documents and Records	Data Assessment Documents and Records	Other
▪ Field logbooks ▪ Chain of custody records ▪ Air bills ▪ Custody seals ▪ Field Change Request forms ▪ Corrective Action forms ▪ Daily Chemical Quality Control Reports ▪ Photo logs	▪ Not applicable – no onsite analysis will be performed.	▪ Sample receipt, chain of custody forms, and sample tracking records ▪ Equipment calibration logs ▪ Sample preparation logs ▪ Case narrative, data packages ▪ Definition of laboratory qualifiers ▪ Equipment maintenance, testing, and inspection logs ▪ Corrective action forms ▪ Reported field sample results ▪ Electronic data deliverables ▪ Reported results with standards, QC checks, and QC samples ▪ Instrument printouts for field samples, standards, and QC samples ▪ Data package completeness checklists ▪ Technical/QA forms ▪ Data assessment reports ▪ Extraction/cleanup records ▪ Sample disposal records	▪ Field sampling audit checklists ▪ Offsite laboratory audit checklists ▪ Data review reports ▪ Corrective action forms ▪ Telephone logs	▪ Disposal facility waste approval forms ▪ Waste shipping manifests and/or bill-of-lading

QAPP Worksheet #30
Analytical Services Table

Matrix	Analytical Group	Concentration Level	Sample Locations/ID Number	Analytical SOP	Data Package Turnaround Time[1]	Laboratory/ Organization (name and address, contact person and telephone number)	Backup Laboratory/ Organization (name and address, contact person and telephone number)
Offsite backfill	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	Offsite backfill and topsoil sources	SW846 8260B SW846 8270D SW846 8081B SW846 8082A SW846 6010C/7471B SW846 9012B HASL-300 (or equivalent gamma spectroscopy method)	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.
Solid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide Oil and Grease Ammonia-Nitrogen, COD Total Volatile Solids Total Solids Free Liquids	Low to High	In-situ from predetermined excavation areas	SW846 8260C SW846 8270D SW846 8081B SW846 8151 SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2 USEPA 1664A SM4500NH3 D SM5220D SM2540G SM2540B SW846 9095	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.
Solid Waste Characterization	PCBs	Low to High	In-situ from predetermined excavation areas	SW846 8082A	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.

Matrix	Analytical Group	Concentration Level	Sample Locations/ID Number	Analytical SOP	Data Package Turnaround Time[1]	Laboratory/ Organization (name and address, contact person and telephone number)	Backup Laboratory/ Organization (name and address, contact person and telephone number)
Liquid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	Storage tanks	SW846 8260C SW846 8270D SW846 8081B SW846 8151 SW846 6010C/7470A SW846 8082A SW846 9045D/9040C SW846 1010 SW846 Section 7.3.3.2 SW846 Section 7.3.4.2	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.

[1] The full deliverable is defined as the complete analytical data report with laboratory quality control results and EDD which will be reviewed by Sevenson. The Sevenson data review will be completed within 7 days of receipt of the full deliverable from the laboratory.

[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #31
Planned Project Assessments Table

Assessment Type	Frequency	Internal or External	Organization Performing Assessment	Person(s) Responsible for Performing Assessment	Person(s) Responsible for Responding to Assessment Findings	Person(s) Responsible for Identifying and Implementing CA	Person(s) Responsible for Monitoring Effectiveness of CA
Specific field procedure assessment and UFP-QAPP compliance	Initially within the first week and the at least quarterly if necessary	Internal	Sevenson self assessment	William Zambrana, Sevenson CQCSM	Sevenson Field Team Leader	Sevenson Field Team Leader	William Zambrana, Sevenson CQCSM Sevenson Field Team Leader
Data review	As data becomes available from the laboratory	Internal and External	Sevenson project chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer
Data review to assign regulatory status of materials for offsite disposal	As data becomes available from the laboratory	Internal	Sevenson regulatory specialist	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator
Daily field documentation review	Daily	Internal	Sevenson self assessment	William Zambrana, Sevenson CQCSM	Sevenson Field Team Leader	Sevenson Field Team Leader	William Zambrana, Sevenson CQCSM Sevenson Field Team Leader
Health and safety audit	Initially within the first week of field work and then at least quarterly if necessary	Internal	Sevenson self assessment	Eric Tschudi, Sevenson SSHO	Kim Lickfield, Sevenson Project Manager	Sevenson Field Team Leader	Eric Tschudi, Sevenson SSHO

QAPP Worksheet #32
Assessment Findings and Corrective Action Responses

Assessment Type	Nature of Deficiencies Documentation	Individual(s) Notified of Findings	Timeframe of Notification	Nature of Corrective Action Response Documentation	Individual(s) Receiving Corrective Action Response	Timeframe for Response
Data validation	Laboratory resubmissions	Laboratory QA officer	After arrival of data from the lab and during data validation activities	Corrective action reports and/or updated case narratives and corrected data submissions	Jennifer Singer, Sevenson Project Chemist	7 business days
Daily field documentation reviews	Internal letter and any verification documentation	Kim Lickfield, Sevenson Project Manager	1 business day	Plan for correction and verification that correction is complete	Kim Lickfield, Sevenson Project Manager	1 business day
Internal project reporting reviews	Internal report comments	Kim Lickfield, Sevenson Project Manager	7 business days	Response to comment and applicable report correction	Kim Lickfield, Sevenson Project Manager	7 business days
Health and safety audit	Written audit report	Kim Lickfield, Sevenson Project Manager	3-5 business days	Letter and any verification documentation	Sevenson Field Team Leader	24 hours after notification

QAPP Worksheet #33
QA Management Reports Table

Type of Report	Frequency	Projected Delivery Date(s)	Person(s) Responsible for Report Preparation	Report Recipient(s)
Daily Chemical Quality Control Report	Daily during field work	Duration of field activities	Sevenson Field Team Leader	Kim Lickfield, Sevenson Project Manager USACE
Field Audit Report	Initially within the first two weeks of field work and with follow-up audits if significant deficiencies are found	Month after field work begins	William Zambrana, Sevenson CQCSM	Kim Lickfield, Sevenson Project Manager
Corrective Action Report	When corrective action is required	When corrective action is implemented	William Zambrana, Sevenson CQCSM	Kim Lickfield, Sevenson Project Manager
Data Review Report	After laboratory data is received	Within 45 days after receiving data	Jennifer Singer, Sevenson Project Chemist	William Zambrana, Sevenson CQCSM Kim Lickfield, Sevenson Project Manager
Quality Control Summary Report	After all lab data is received and reviewed	Within 45 days after receipt of the last laboratory data report	Jennifer Singer, Sevenson Project Chemist	USACE, USEPA
Health and Safety Audit	Once	Submitted with Final Reports	Eric Tschudi, Sevenson SSHO	USACE, USEPA

QAPP Worksheet #34
Verification (Step I) Process Table

Verification Input	Description	Internal/ External	Responsible for Verification
Chain of custody and shipping forms	COC forms and shipping documentation will be reviewed internally upon their completion and verified against the packed sample coolers they represent. The shipper's signature on the COC will be initialed by the reviewer, a copy of the COC retained in the site files, and the original and remaining copies taped inside the cooler for shipment. Refer to Worksheet #27 for additional details.	Internal	William Zambrana, Sevenson
Audit reports	Upon report completion, a copy of all audit reports will be placed in the site file. If corrective actions are required, a copy of the documented corrective action will be attached to the appropriate audit report in the site file. Copies of Sevenson's internal QC checklists, corrective action forms, and field change request forms are included in Appendix 5.	Internal	William Zambrana, Sevenson
Field notes	Field notes will be reviewed internally at the end of each working day and placed in the site file.	Internal	William Zambrana, Sevenson
Laboratory data	All laboratory packages will be verified internally by the laboratory performing the work for completeness and technical accuracy prior to submittal. All data packages will be verified internally by the Sevenson project chemist or designee according to the data review procedures specified in Worksheet #36.	Internal/External	Laboratory QA Officer Jennifer Singer, Sevenson
UFP-QAPP	All planning documents will be available to reviewers to allow reconciliation with planned activities and objectives.	Internal	William Zambrana, Sevenson Jennifer Singer, Sevenson

QAPP Worksheet #35
Validation (Steps IIa and IIb) Process Table

Step IIa / IIb	Validation Input	Description	Responsible for Validation
IIa	Laboratory data packages	Ensure that all analytical procedures were followed. Corrective actions will be taken and documented when applicable per specific methods. Data will be qualified in accordance with specific methods. Any deviations will be documented.	Laboratory personnel Jennifer Singer, Sevenson
IIa	Documentation of method QC results	Establish that all method required QC samples were run and met required limits.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Documentation of UFP-QAPP QC sample results	Establish that all UFP-QAPP required QC samples were run and met required limits.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Project quantitation limits	All sample results met the project quantitation limit specified in the UFP-QAPP.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Sampling procedures	Evaluate whether sampling procedures were followed with respect to equipment and proper sampling support.	William Zambrana, Sevenson Jennifer Singer, Sevenson
IIb	Deviations (sampling and analysis)	Determine the impacts of any deviations from sampling or analytical methods and SOPs	William Zambrana, Sevenson Jennifer Singer, Sevenson USACE USEPA

QAPP Worksheet #36
Validation (Steps IIa and IIb) Summary Table

Step IIa / IIb	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator
IIa/IIb	Offsite backfill	Metals, cyanide, VOCs, SVOCs, PCBs, pesticides, and radiological parameters	Trace to Low	*Organic:* USEPA National Functional Guidelines; *Inorganic:* USEPA National Functional Guidelines; *Radiological:* MARLAP, Chapter 8, Section 5	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Solid Waste Characterization[1]	TCLP VOCs, SVOCs, Pesticides, Herbicides, Metals PCBs RCRA Characteristics (pH, ignitability, reactive cyanide, reactive sulfide) Pennsylvania Form U (oil and grease, ammonia-nitrogen, COD, Total Volatile Solids, Total Solids, Free Liquids)	Low to High	*Organic:* USEPA National Functional Guidelines; *Inorganic:* USEPA National Functional Guidelines	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Solid Waste Characterization	PCBs	Low to High	*Organic:* USEPA National Functional Guidelines	Jennifer Singer, Sevenson Data Quality Control Review Chemist

Step IIa / IIb	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator
IIa/IIb	Liquid Waste Characterization[1]	TCLP VOCs, SVOCs, Pesticides, Herbicides, Metals PCBs RCRA Characteristics (pH, ignitability, reactive cyanide, reactive sulfide)	Low to High	*Organic:* USEPA National Functional Guidelines; *Inorganic:* USEPA National Functional Guidelines	Jennifer Singer, Sevenson Data Quality Control Review Chemist

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #37
Usability Assessment

Summarize the usability assessment and all procedures, including interim steps and any statistics, equations, and computer algorithms that will be used:

It is the responsibility of the Sevenson Project Chemist and the laboratory to ensure that the data meet the method detection limits, reporting limits, and laboratory QC limits listed in the UFP-QAPP. During the data validation assessment, non-conformances are documented and data are qualified for use in decision making. The data are determined to be usable by the Project Chemist based on the requirements of this UFP-QAPP. Data gaps will be present if a sample is not collected, a sample is not analyzed for the requested parameters, or the data are determined to be unusable. The need for further investigation will be determined on a case-by-case basis, depending on whether data can be extrapolated from adjacent sampling locations, and whether or not the results are unnecessary based on the results from adjacent locations. All data are usable as qualified by the data validator, with the exception of rejected data. Estimated and/or biased results are usable.

Describe the evaluative procedures used to assess overall measurement error associated with the project:

In depth assessment occurs during the data validation process. The validation will follow approved USEPA Region 2 Guidelines and SOPs to assess conformance with the requirements of the methods, SOPs, and objectives of this UFP-QAPP. The findings of the data validation will generate qualifiers applied to the data considered in context to assess overall usability of the data.

Identify the personnel responsible for performing the usability assessment:

Jennifer Singer, Sevenson Project Chemist

Describe the documentation that will be generated during usability assessment and how usability assessment results will be presented so that they identify trends, relationships (correlations), and anomalies:

The data validation reports will identify precision and accuracy exceedances with respect to the laboratory performance for each batch of samples, as well as comparability of field and laboratory duplicates. All the results will be assembled and reported for an overall quality assessment provided in the QCSR and final project report. Discussion will cover precision, accuracy/bias, sensitivity, representativeness, comparability, completeness, and reconciliation, defined as follows.

Precision. Results of laboratory duplicates will be assessed during data review and data will be qualified according to the data review procedures cited on Worksheet #36. Field duplicate samples will not be collected due to the limited nature of the sampling. A discussion summarizing the results of laboratory precision and any limitations on the use of the data will be described in the QCSR.

Accuracy/Bias Contamination. Results of laboratory blanks will be assessed as part of data review. During the review process the reviewer will qualify the data following the procedures described on Worksheet #36. A discussion summarizing the results of laboratory accuracy and bias based on contamination will be presented and any limitation on the use of the data will be described in the QCSR.

Overall Accuracy/Bias. The results of matrix spike recoveries will be reviewed and data will be qualified according to the data review procedures cited on Worksheet #36. A discussion summarizing the results of laboratory accuracy and any limitations on the use of the data will be described in the QCSR.

Sensitivity. Data results will be compared to clean-up criteria provided on Worksheet #15. A discussion summarizing any conclusions about the sensitivity of the analyses will be presented and any limitations on the use of the data will be described in the QCSR.

Representativeness. A review of adherence to field procedures and of project quality control audits will be performed in order to assess the representativeness of the sampling program. Data review narratives will also be reviewed and any conclusions about the representativeness of the data set will be discussed.

Comparability. Data will be collected, analyzed, and reported in a manner that is comparable to the existing site data.

Completeness. A completeness check will be done on all data generated by the laboratory. Completeness will be calculated for each analyte as follows. For sampling, completeness will be calculated as the number of samples collected and analyzed by the laboratory divided by the number planned for collection. Also for each analyte, completeness will be calculated as the number of data points for each analyte that meets measurement performance criteria divided by the total number of data points for that analyte. A discussion summarizing the results of project completeness and any limitations on the use of the data will be described in the QCSR.

Reconciliation. The project quality objectives presented in Worksheet #12 will be examined to determine if the objective was met. This examination will include a combined overall assessment of the results of each analysis pertinent to an objective. Each analysis will first be evaluated separately in terms of major impacts observed from data review, data quality indicators, and measurement performance criteria assessments. Based on the results of these assessments, the quality of the data will be determined. Based on the quality determined, the usability of the data for each analysis will be determined. Based on the combined usability of the data from all analyses for an objective, it will be determined if the project quality objective was met and whether project goals were achieved. As part of the reconciliation of each objective, conclusions will be drawn and any limitations on the usability of any of the data will be described.

Comments on the Quality Assurance Project Plan, Revision 0 Cornell-Dubilier Superfund Site Operable Unit 1 – Soil Remediation			
Reviewer Comment No	**Section**	**Comment**	**Response**
1	General	This QAPP was prepared prior to identification and approval of a subcontracted laboratory. Therefore, the QAPP will require revision to include the laboratory-specific information required on the worksheets.	As applicable, worksheets have been revised to include laboratory-specific information for the subcontracted laboratory, Spectrum Analytical, Inc. of Warwick, Rhode Island.
2	General	The QAPP includes a couple of references to the Pennsylvania Department of Environmental Protection. If these are in error, please correct.	The excavated material may be disposed of at a facility located in Pennsylvania; therefore, the analytical requirements of the facility are governed by the Pennsylvania DEP. No changes made to the document based on this comment.
3	General	Several of the attached figures are from the plans and specs document and, as such, are meant to be printed on large paper. Please identify how you will ensure that the field crew has access to figures that are legible.	Large plots are available onsite. Worksheets #10 and #17-2 have been revised to direct the reader/field crew to the drawings available onsite.
4	Introduction, page 6	In this section and in Worksheet #10, please add description such as: *remedial design has been completed and the work included sampling and analysis to define the extent of the excavations to be performed under this QAPP*.	The Introduction (Site Specific Definition of the Problem) and Worksheet #10 (Problem Definition) have been revised.
5	Worksheet 2, page 8	Under dates and titles of QAPP, please include a reference to the Malcolm Pirnie QAPP for RD of OU1. Please confirm the most recent one is: Final QAPP, Cornell OU1, Vicinity Property Pre-Design Sampling, dated March 2008.	Worksheet #2 has been revised.
6	Worksheet 6, page 20	Please include communication pathways with USACE-NYD, USACE-KCD, and EPA.	Worksheet #6 has been revised.
7	Worksheet 9, page 23	For notes on May 5 conversation, please edit text to something like: "EPA Region 2's implementation of the FASTAC process provides the "for all non-time critical data collection projects, EPA Region 2 requires a sequential decision tree for procuring Superfund analytical services". The work described in this QAPP is time-critical, due to safety concerns with deep excavations in residential yards. Therefore, a subcontracted laboratory will be identified that can meet the required 5-day turn around time."	Worksheet #9 has been revised.

Comments on the Quality Assurance Project Plan, Revision 0 Cornell-Dubilier Superfund Site Operable Unit 1 – Soil Remediation			
Reviewer Comment No	**Section**	**Comment**	**Response**
8	Worksheet 10, page 24	The problem definition includes the indoor dust project. If no dust work will be done under this QAPP, please state that in the text.	The references to indoor dust have been removed from Worksheet #10. The Introduction, Project Background section has been revised to indicate that no indoor dust remediation will be conducted under the current contract.
9	Worksheet 10, page 24	The worksheet includes a description of three remediation areas. If there is the possibility that more areas will be added, please include how the information will be amended or revised to this QAPP.	A sentence has been added to Worksheet #10, indicated that an addendum will be submitted for any additional properties requiring remediation.
10	Worksheet 11, page 27	Text indicates that Automated Data Review (ADR) and Environmental Data Management System (EDMS) will be used for this project. Note that these programs are not a requirement of the project, but may be used at the contractor's discretion. The requirement is to submit the data to the Region II database.	E-mail correspondence with Amy Darpinian on 6/18/12 confirmed that waste characterization and backfill data is not required to be captured in the Region II database. No changes made to the document based on this comment.
11	Worksheet 13, page 45	Text described that data will be used to define the initial soil excavations. Although this is true, I believe the previous documents (plans and specs) also define the final soil excavations. Please revise.	Sevenson will be using the previous documents to drive the soil excavations; no pre- or post-excavation sampling will be conducted by Sevenson. Worksheet #13 has been revised to read "Historical data that will define the limits of the soil excavations."
12	Worksheet 14, page 46	Text describes identification of the disposal facilities. Note that the facility will need approval by USACE and EPA prior to use. If this is not described in a different plan, please include it in this QAPP.	A reference to the Transportation and Disposal Plan has been added to Worksheet #14. It is understood that the facility will need approval prior to use.
13	Worksheet 14, page 46	For the topsoil/backfill sampling effort, please give the NJDEP citation for analytical requirements.	References to NJAC 7:26D and NJAC 7:26E have been added to Worksheet #14.
14	Worksheet 17-1 and others	Are the sampling procedures described applicable to backfill? Identify how the location and depth will be selected.	The sampling procedures described are applicable to backfill sampling. The sample location is determined when the facility point of contact identifies which pile of backfill material will be used for the site. The depth is determined as described in Worksheet #17 (i.e., at a minimum from the top six inches of soil).
15	Worksheet 14, page 46	For QC Tasks, please include the tasks described in Worksheet 31.	Further details have been added to Worksheet #14 regarding Sevenson field QC activities.
16	Worksheet 14, page 46	Please define the task, such as, "the contractor has reviewed the reports and … to develop the current QAPP".	Worksheet #14, Secondary Data section has been revised.

Comments on the Quality Assurance Project Plan, Revision 0 Cornell-Dubilier Superfund Site Operable Unit 1 – Soil Remediation			
Reviewer Comment No	**Section**	**Comment**	**Response**
17	Worksheet 14, page 46	Please include the requirement to submit the data to the EPA R2 database.	E-mail correspondence with Amy Darpinian on 6/18/12 confirmed that waste characterization and backfill data is not required to be captured in the Region II database. No changes made to the document based on this comment.
18	Worksheets 18, 19, and others	For analysis of VOCs, please use the designation of "trace" concentration levels. For all others, use the designation of "low". We certainly don't expect out backfill samples to have high concentrations.	All applicable worksheets have been revised to read "trace" for VOCs and "low" for all other parameters with respect to backfill sample concentration levels. No changes were made to the concentration levels for the waste characterization samples – there are locations with high concentrations of PCBs.
19	Worksheet 21	The sampling SOP is cited as the NJDEP Field Sampling Procedures Manual, August 2005 as described with text on Worksheet 17. As the manual is 574 pages, please add more guidance on this page for specific procedures, such as citing sections of the manual.	Worksheet #21 has been revised to include specific sections of the NJDEP Manual that should be referenced.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/13/2012

TRANSMITTAL NO.: 01450A-16.2

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
7	Quality Assura Project Plan (QAPP) Rev 2	PRECON SUBMTL	2	1.4		A	N	

REMARKS
with Addandum 1 attachment

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

QUALITY ASSURANCE PROJECT PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
OPERABLE UNIT 1 – SOIL REMEDIATION
SOUTH PLAINFIELD, NEW JERSEY

Prepared by:
Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Based on the Intergovernmental Data Quality Task Force
Uniform Federal Policy for Quality Assurance Project Plans
(Final Version 1, March 2005)

Revision 2: September 6, 2012

QUALITY ASSURANCE PROJECT PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
OPERABLE UNIT 1 – SOIL REMEDIATION
SOUTH PLAINFIELD, NEW JERSEY

Prepared by:
Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Based on the Intergovernmental Data Quality Task Force
Uniform Federal Policy for Quality Assurance Project Plans
(Final Version 1, March 2005)

Revision 2: September 6, 2012

Page intentionally left blank

TABLE OF CONTENTS

Introduction 5
QAPP Worksheet #1. Title and Approval Page 8
QAPP Worksheet #2. QAPP Identifying Information 9
QAPP Worksheet #3. Distribution List 14
QAPP Worksheet #4. Project Personnel Sign-Off Sheet 15
QAPP Worksheet #5. Project Organizational Chart 18
QAPP Worksheet #6. Communication Pathways 21
QAPP Worksheet #7. Personnel Responsibilities and Qualifications Table 23
QAPP Worksheet #8. Special Personnel Training Requirements Table 24
QAPP Worksheet #9. Project Scoping Session Participants Sheet 25
QAPP Worksheet #10. Problem Definition 26
QAPP Worksheet #11. Project Quality Objectives/Systematic Planning Process Statements 28
QAPP Worksheet #12. Measurement Performance Criteria Table 30
QAPP Worksheet #13. Secondary Data Criteria and Limitations Table 41
QAPP Worksheet #14. Summary of Project Tasks 42
QAPP Worksheet #15. Reference Limits and Evaluation Table 44
QAPP Worksheet #16. Project Schedule/Timeline Table 61
QAPP Worksheet #17. Sampling Design and Rationale 62
QAPP Worksheet #18. Sampling Locations and Methods/SOP Requirements Table 67
QAPP Worksheet #19. Analytical SOP Requirements Table 69
QAPP Worksheet #20. Field Quality Control Sample Summary Table 72
QAPP Worksheet #21. Project Sampling SOP Reference Table 74
QAPP Worksheet #22. Field Equipment Calibration, Maintenance, Testing, and Inspection Table 75
QAPP Worksheet #23. Analytical SOP Reference Table 76
QAPP Worksheet #24. Analytical Instrument Calibration Table 78
QAPP Worksheet #25. Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table 87
QAPP Worksheet #26. Sample Handling System 90
QAPP Worksheet #27. Sample Custody Requirements 91
QAPP Worksheet #28. QC Samples Table 95
QAPP Worksheet #29. Project Documents and Records Table 109
QAPP Worksheet #30. Analytical Services Table 110
QAPP Worksheet #31. Planned Project Assessment Table 112
QAPP Worksheet #32. Assessment Findings and Response Actions 113
QAPP Worksheet #33. QA Management Reports Table 114
QAPP Worksheet #34. Sampling and Analysis Verification (Step I) Process Table 115
QAPP Worksheet #35. Sampling and Analysis Validation (Steps IIa and IIb) Process Table 116
QAPP Worksheet #36. Sampling and Analysis Validation (Steps IIa and IIb) Summary Table 117
QAPP Worksheet #37. Data Usability Assessment 118

LIST OF ATTACMENTS AND APPENDICES

Appendix 1 – Figures
- Site Location Map
- Key Map
- Property 108, 129, 301, and 303 Excavation Plan
- Property 116 and 302 Excavation Plan
- Property 128, 304, and 305 Excavation Plan

Appendix 2 – Data Needs Table
Appendix 3 – Data Quality Objectives
Appendix 4 – Measurement Performance Criteria
Appendix 5 – Standard Sample Tracking and Documentation Forms, Review Forms, and Checklists
- Sample Identification Label
- Chain of Custody Form
- Preparatory Phase Checklist
- Initial/Follow-Up Phase Inspection Checklist
- Daily Chemical Quality Control Report
- Site QC Inspection Report
- Task Specific QC Checklist – Work Task: Packing, Storing, and Shipment of Samples
- Task Specific QC Checklist – Work Task: Field Documentation
- Task Specific QC Checklist – Work Task: Decontamination
- Task Specific QC Checklist – Work Task: Sample Cooler Shipment
- Field Change Request Form
- Non-Conformance/Quality Control Report

Appendix 6 – Laboratory Standard Operating Procedures

LIST OF ABBREVIATIONS AND ACRONYMS

ADR	Automated Data Review
ANSETS	Analytical Services Tracking System
AOC	Administrative Order of Consent
ATSDR	Agency for Toxic Substances and Disease Registry
BFB	Bromofluorobenzene
bgs	Below Ground Surface
CA	Corrective Action
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CHMM	Certified Hazardous Materials Manager
CIH	Certified Industrial Hygienist
COC	Chain of Custody
COD	Chemical Oxygen Demand
COR	Contracting Officer Representative
CQCSM	Contractor Quality Control Systems Manager
CVAA	Cold Vapor Atomic Absorption
DFTPP	Decachlorotriphenylphosphine
DOD	Department of Defense
DQI	Data Quality Indicator
DQO	Data Quality Objective
DSC	D.S.C. of Newark Enterprises, Inc.
EDD	Electronic Data Deliverable
EDMS	Environmental Data Management System
ELAP	Environmental Laboratory Accreditation Program
FASTAC	Field and Analytical Services Teaming Advisory Committee
FWHM	Full Width at Half Maximum
GC-ECD	Gas Chromatography with Electron Capture Detector
GC/MS	Gas Chromatography/Mass Spectroscopy
ICB	Initial Calibration Blank
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectrometry
ICS	Interference Check Sample
ICV	Initial Calibration Verification
KCD	Kansas City District
LCS	Laboratory Control Sample
LIMS	Laboratory Information Management System
LOD	Limit of Detection
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MPC	Measurement Performance Criteria
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NAD	Normalized Absolute Difference
NJDEP	New Jersey Department of Environmental Protection
NORM	Naturally Occurring Radioactive Material
NPL	National Priorities List
NYD	New York District
OSHA	Occupational Safety and Health Administration
OU-1	Operable Unit 1
PCB	Polychlorinated Biphenyl
PDS	Post-Digestion Spike
PM	Project Manager
ppm	Parts Per Million
PQL	Practical Quantitation Limit

PRAC	Pre-Placed Remedial Action Contract
QA	Quality Assurance
QC	Quality Control
QCSR	Quality Control Summary Report
QL	Quantitation Limit
QSM	Quality Systems Manual
RCRA	Resource Conservation and Recovery Act
RDCSRS	Residential Direct Contact Soil Remediation Standards
REM	Registered Environmental Manager
RL	Reporting Limit
ROD	Record of Decision
RPD	Relative Percent Difference
RPM	Remedial Project Manager
RRF	Relative Response Factor
RSD	Relative Standard Deviation
Sevenson	Sevenson Environmental Services, Inc.
SOP	Standard Operating Procedure
Spectrum	Spectrum Analytical, Inc.
SSHERP	Site Safety, Health, and Emergency Response Plan
SSHO	Site Safety and Health Officer
SVOC	Semi-Volatile Organic Compound
TBD	To Be Determined
TCLP	Toxicity Characteristic Leachate Procedure
TSCA	Toxic Substance Control Act
UFP- QAPP	Uniform Federal Policy - Quality Assurance Project Plan
UPS	United Parcel Service
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
yd^3	Cubic Yard

INTRODUCTION

Project Background

The Cornell-Dubilier Electronics Superfund Site (the site) is located at 333 Hamilton Boulevard in South Plainfield, Middlesex County, New Jersey. A site location map is included in Appendix 1. The United States Environmental Protection Agency (USEPA) assigned identification number NJD981557879 to the site.

The site consists of approximately 26 acres including the Hamilton Industrial Park, contaminated portions of the Bound Brook adjacent to and downstream of the industrial park, and contaminated residential, municipal, and commercial properties in the vicinity of the former Cornell-Dubilier Electronics Corporation, Inc. facility. Former buildings on the site have been demolished and their footprints covered with temporary asphalt pavement. The only remaining building at the site is a water tower. The site is bounded by the Lehigh Valley Railroad, Perth Amboy Branch (presently Conrail) to the northeast, the South Plainfield Department of Public Works property to the southeast, by single-family residential properties across Spicer Avenue to the southwest, and by mixed residential and commercial properties across Hamilton Boulevard to the northwest. The area is a busy, heavily developed, mixed-use neighborhood.

The site remediation was separated into multiple Operable Units. The scope of the current remedial action is Operable Unit 1 (OU-1), specifically remediation of residential, commercial, and municipal properties in the vicinity of the former Cornell-Dubilier Electronics facility. The response action selected in the Record of Decision (ROD) dated September 2003 for OU-1 soils includes:

- Excavation of contaminated soil containing polychlorinated biphenyls (PCBs) from properties, backfilling with clean fill, and property restoration as necessary.
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary.
- Indoor dust remediation where PCB-contaminated dust is encountered.
- Where necessary, temporary relocation of residents during the indoor remediation.

The purpose of this Uniform Federal Policy – Quality Assurance Project Plan (UFP-QAPP) is to provide procedures for the collection, analysis, and evaluation of data for the OU-1 soils in accordance with the response action selected in the ROD. No work will be conducted under the current contract with regards to the indoor dust remediation.

Site History and Contaminants

Cornell-Dubilier Electronics manufactured electronic parts and components, including capacitors, from 1936 to 1962. PCBs and chlorinated organic degreasing solvents were used in the manufacturing process. It is alleged that during the period of operation, Cornell-Dubilier Electronics dumped PCB-contaminated materials and other hazardous substances directly onto site soils. A former employee has claimed that the rear of the property was saturated with transformer oils and that capacitors were also buried behind the facility during the same time period (Foster Wheeler, 2002). Based on historic site practices, portions of the site have the potential to be contaminated with volatile organic compounds (VOCs; primarily trichloroethene and dechlorination products), PCBs, dioxins, metals (primarily mercury and lead), and other constituents of potential concern. Historical site data pertaining to OU-1 are summarized in the documents included in Worksheet #13 of this UFP-QAPP.

State and Federal Response Actions

In June 1994, at the request of the New Jersey Department of Environmental Protection (NJDEP), USEPA collected and analyzed soil, surface water, and sediments at the facility. The results of the sample analyses revealed that elevated levels of PCBs, VOCs, and inorganic chemicals were present at the site.

In February, June, and July 1996, USEPA collected and analyzed additional soil samples at the facility. The results confirmed the presence of elevated levels of PCBs, and also identified the presence of lead.

As a result of the contamination found at the facility, in March 1997, USEPA ordered the owner of the facility property, D.S.C. of Newark Enterprises, Inc., (DSC) to perform a removal action to mitigate risks associated with contaminated soil and surface water runoff from the facility. The removal action included paving driveways and parking areas in the industrial park, installing a security fence, and implementing drainage controls.

In 1997, USEPA conducted a preliminary investigation of the Bound Brook to evaluate the potential impacts of contamination on human health and the environment. Elevated levels of PCBs were found in fish and sediments of the Bound Brook. As a result of these investigations, NJDEP issued a fish consumption advisory for Bound Brook and its tributaries, including New Market Pond and Spring Lake.

In October and November 1997, USEPA collected soil and indoor dust samples from residential properties on Spicer Avenue, near the facility property. USEPA and the Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the data obtained from this sampling and concluded that exposure to dust and soil posed a potential health concern for residents at several of the properties tested. To limit the potential for exposure to PCBs until a final remedy could be selected, USEPA initiated another removal action to clean the interiors of seven homes on Spicer Avenue, Garibaldi Avenue, and Hamilton Boulevard. USEPA performed interior cleaning on seven properties and entered into an administrative order of consent (AOC) with DSC and Cornell-Dubilier Electronics for removal of contaminated soil from six properties. Interior dust remediation was completed in April 1998, and removal of PCB-contaminated soil was completed in September 1999.

In 1998, USEPA expanded its investigation to Delmore Avenue and Hamilton Boulevard near the industrial park. Again, USEPA determined that PCBs found in dust and soil posed a potential health concern for residents. USEPA cleaned the interiors of eight homes on Delmore Avenue and Hamilton Boulevard, and entered into another AOC for removal of contaminated soil from seven properties. These removal actions were completed in January 2000, further limiting the potential for exposure until a final remedy could be selected.

In July 1998, USEPA included the site on the National Priorities List (NPL).

Site Specific Definition of the Problem

A complete description of the problem definition is included in Worksheet #10 of this UFP-QAPP. Work is being conducted at properties located in the vicinity of the former Cornell-Dubilier Electronics facility due to contamination found in soil associated with past industrial operations conducted at the site. A remedial design for OU-1 soil has been completed, and the work included the sampling and analysis required to define the extent of the excavations to be performed under this UFP-QAPP. Sevenson will be responsible for removal of contaminated soil based upon the predetermined limits of excavation; backfilling of excavations with offsite materials; transportation of all soil and debris to an offsite disposal

facility; site restoration and implementation of appropriate site controls; and other activities necessary for complete and proper remediation of the site.

QAPP Worksheet #1
Title and Approval Page

Site Name/Project Name: Cornell-Dubilier Electronics Superfund Site

Site Location: South Plainfield, New Jersey

Document Title: Uniform Federal Policy – Quality Assurance Project Plan for Cornell-Dubilier Electronics Superfund Site, Operable Unit 1 - Soil Remediation

Lead Organization: United States Army Corps of Engineers (USACE) – Kansas City District (KCD), USACE – New York District (NYD), and USEPA Region II

Preparer's Name and Organizational Affiliation: Jennifer Singer, Sevenson Environmental Services, Inc. (Sevenson)

Preparer's Address, Telephone Number, and E-mail Address: 2749 Lockport Road, Niagara Falls, New York 14305; (716) 284-0431; jsinger@sevenson.com

Preparation Date: Revision 2: September 6, 2012

Contractor's Project Manager: 9-10-12
Signature, Date
Kim Lickfield, Sevenson Environmental Services, Inc.

Contractor's Project QA Officer: 9/6/12
Signature, Date
William Zambrana, Sevenson Environmental Services, Inc.

Lead Organization's Project Manager:
Signature, Date
Ken Mass, USACE

Approval Signatures:
Signature, Date
Diego Garcia, USEPA

Other Approval Signatures:
Signature, Date
Patrick Nejand, USACE COR

Signature, Date

Printed Name/Title/Organization

QAPP Worksheet #2
QAPP Identifying Information

Site Name/Project Name: Cornell-Dubilier Electronics Superfund Site

Site Location: South Plainfield, New Jersey

Site Number/Code: NJD981557879

Operable Unit: OU1 – Soil Remediation

Contractor Name: Sevenson Environmental Services, Inc.

Contractor Number: W912DQ-10-D-3006

Contract Title: Large Business Remediation Services Pre-Placed Remedial Action Contract (PRAC)

Work Assignment Number: Task Order #0002

1. Identify guidance used to prepare QAPP:
Uniform Federal Policy for Quality Assurance Project Plans, Final Version 1, March 2005
Guidance on Systematic Planning Using the Data Quality Objective Process, EPA QA/G-4, EPA/240/B-06/006, February 2006

2. Identify regulatory program:
USEPA Region II, Superfund

3. Identify approval entity:
USEPA Region II, USACE-KCD, USACE-NYD

4. Indicate whether the QAPP is a generic or a project-specific QAPP.

5. List dates of scoping sessions that were held: May 2012

6. List dates and titles of QAPP documents written for previous site work, if applicable:
Quality Assurance Project Plan – Final Soils (Malcolm Pirnie, Inc., August 2006)
Quality Assurance Project Plan – OU2, Cluster 12 (Sevenson, November 2006)
Quality Assurance Project Plan – OU2, Cluster 12, Revision 1 (Sevenson, December 2006)
Quality Assurance Project Plan – OU2, Cluster 12, Revision 2 (Sevenson, December 2006)
UFP-QAPP – OU-2, Building Demolition (Sevenson, April 2007)
UFP-QAPP – OU-2, Building Demolition, Addendum 1, Capacitor Disposal Area, Revision 3 (Sevenson, October 2007)
UFP-QAPP – OU1 Vicinity Property Pre-Design Sampling (Malcolm Pirnie, Inc., March 2008)
UFP-QAPP – OU-2, Soil Remediation, Revision 3 (Sevenson, April 2009)
UFP-QAPP – OU-2, Soil Remediation, Addendum 1, Temporary Water Treatment Facility, Revision 1 (Sevenson, November 2009)
UFP-QAPP – OU2, Soil Remediation, Addendum 2, Low-Temperature Thermal Desorption Operational Samples (Sevenson, March 2011)

7. List organizational partners (stakeholders) and connection with lead organization:
The project organizational partners include representatives from USEPA Region II, USACE-KCD, USACE-NYD, and Sevenson. The USEPA and USACE will provide project and contract management guidance to Sevenson. Sevenson will be the primary contractor and will be responsible for developing and implementing the remedial action and will provide project management to any other subcontractors.

8. List data users:
USEPA Region II, USACE-KCD, USACE-NYD, NJDEP, Sevenson

9. If any required QAPP elements and required information are not applicable to the project, then circle the omitted QAPP elements and required information on the attached table. Provide an explanation for their exclusion below:
No required QAPP elements were omitted.

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
Project Management and Objectives		
2.1 Title and Approval Page	1	- Title and Approval Page
2.2 Document Format and Table of Contents 2.2.1 Document Control Format 2.2.2 Document Control Numbering System 2.2.3 Table of Contents 2.2.4 QAPP Identifying Information	2	- Table of Contents - QAPP Identifying Information
2.3 Distribution List and Project Personnel Sign-Off Sheet 2.3.1 Distribution List 2.3.2 Project Personnel Sign-Off Sheet	3 4	- Distribution List - Project Personnel Sign-Off Sheet
2.4 Project Organization 2.4.1 Project Organizational Chart 2.4.2 Communication Pathways 2.4.3 Personnel Responsibilities and Qualifications 2.4.4 Special Training Requirements and Certification	5 6 7 8	- Project Organizational Chart - Communication Pathways - Personnel Responsibilities and Qualifications Table - Special Personnel Training Requirements Table
2.5 Project Planning/Problem Definition 2.5.1 Project Planning (Scoping) 2.5.2 Problem Definition, Site History, and Background	9 10 Site maps included in Appendix 1	- Project Planning Session Documentation (including Data Needs tables) - Project Scoping Session Participants Sheet - Problem Definition, Site History, and Background - Site Maps (historical and present)
2.6 Project Quality Objectives and Measurement Performance Criteria 2.6.1 Development of Project Quality Objectives Using the Systematic Planning Process 2.6.2 Measurement Performance Criteria	11 12	- Site-Specific PQOs - Measurement Performance Criteria Table

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
2.7 Secondary Data Evaluation	13	- Sources of Secondary Data and Information - Secondary Data Criteria and Limitations Table
2.8 Project Overview and Schedule 2.8.1 Project Overview 2.8.2 Project Schedule	14 15 16	- Summary of Project Tasks - Reference Limits and Evaluation Table - Project Schedule/Timeline Table
Measurement/Data Acquisition		
3.1 Sampling Tasks 3.1.1 Sampling Process Design and Rationale 3.1.2 Sampling Procedures and Requirements 3.1.2.1 Sampling Collection Procedures 3.1.2.2 Sample Containers, Volume, and Preservation 3.1.2.3 Equipment/Sample Containers Cleaning and Decontamination Procedures 3.1.2.4 Field Equipment Calibration, Maintenance, Testing, and Inspection Procedures 3.1.2.5 Supply Inspection and Acceptance Procedures 3.1.2.6 Field Documentation Procedures	17 18 19 20 21 22	- Sampling Design and Rationale - Sample Location Map - Sampling Locations and Methods/ SOP Requirements Table - Analytical Methods/SOP Requirements Table - Field Quality Control Sample Summary Table - Sampling SOPs - Project Sampling SOP References Table - Field Equipment Calibration, Maintenance, Testing, and Inspection Table
3.2 Analytical Tasks 3.2.1 Analytical SOPs 3.2.2 Analytical Instrument Calibration Procedures 3.2.3 Analytical Instrument and Equipment Maintenance, Testing, and Inspection Procedures 3.2.4 Analytical Supply Inspection and Acceptance Procedures	23 24 25	- Analytical SOPs - Analytical SOP References Table - Analytical Instrument Calibration Table - Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
3.3 Sample Collection Documentation, Handling, Tracking, and Custody Procedures 3.3.1 Sample Collection Documentation 3.3.2 Sample Handling and Tracking System 3.3.3 Sample Custody	26	- Sample Collection Documentation Handling, Tracking, and Custody SOPs - Sample Container Identification - Sample Handling Flow Diagram - Example Chain-of-Custody Form and Seal
3.4 Quality Control Samples 3.4.1 Sampling Quality Control Samples 3.4.2 Analytical Quality Control Samples	27	- QC Samples Table - Screening/Confirmatory Analysis Decision Tree
3.5 Data Management Tasks 3.5.1 Project Documentation and Records 3.5.2 Data Package Deliverables 3.5.3 Data Reporting Formats 3.5.4 Data Handling and Management 3.5.5 Data Tracking and Control	28 29	- Project Documents and Records Table - Analytical Services Table - Data Management SOPs
Assessment/Oversight		
4.1 Assessments and Response Actions 4.1.1 Planned Assessments 4.1.2 Assessment Findings and Corrective Action Responses	30 31	- Assessments and Response Actions - Planned Project Assessments Table - Audit Checklists - Assessment Findings and Corrective Action Responses Table
4.2 QA Management Reports	32	- QA Management Reports Table
4.3 Final Project Report		
Data Review		
5.1 Overview		

Required QAPP Element(s) and Corresponding QAPP Section(s)	QAPP Worksheet # in QAPP Workbook	Required Information
5.2 Data Review Steps 5.2.1 Step I: Verification 5.2.2 Step II: Validation 5.2.2.1 Step IIa Validation Activities 5.2.2.2 Step IIb Validation Activities 5.2.3 Step III: Usability Assessment 5.2.3.1 Data Limitations and Actions from Usability Assessment 5.2.3.2 Activities	33 34 35 36 37	- Verification (Step I) Process Table - Validation (Steps IIa and IIb) Process Table - Validation (Steps IIa and IIb) Summary Table - Usability Assessment
5.3 Streamlining Data Review 5.3.1 Data Review Steps To Be Streamlined 5.3.2 Criteria for Streamlining Data Review 5.3.3 Amounts and Types of Data Appropriate for Streamlining	36	

QAPP Worksheet #3
Distribution List

QAPP Recipients	Title	Organization	Telephone Number	Fax Number	E-mail Address	Document Control Number
Diego Garcia	Remedial Project Manager (RPM)	USEPA	(212) 637-4947		Garcia.diego@epamail.epa.gov	CDESS-QAPP-01
Ken Maas	KCD Project Manager (PM)	USACE	(816) 983-3709		Kenneth.e.maas@usace.army.mil	CDESS-QAPP-02
Patrick Nejand	Contracting Officer Representative (COR)	USACE	(732) 846-5830		Patrick.c.nejand@uace.army.mil	CDESS-QAPP-03
Paula Higgins	Chief NYD Safety	USACE	(212) 264-9050			CDESS-QAPP-04
Chris Nastasi	Project Engineer	USACE	(732) 846-5830		Chris.j.nastasi@usace.army.mil	CDESS-QAPP-05
Ben Girard	PM	Arcadis	(716) 667-0900		Ben.girard@arcadis-us.com	CDESS-QAPP-06
William Zambrana	Contractor Quality Control Systems Manager (CQCSM)	Sevenson	(908) 769-5301	(908) 769-5303	wzambrana@sevenson.com	CDESS-QAPP-07
Jennifer Singer	Data Quality Control Review Chemist	Sevenson	(716) 284-0431	(716) 285-4201	jsinger@sevenson.com	CDESS-QAPP-08
Agnes Huntley	PM	Spectrum Analytical, Inc. (Spectrum)	(401) 732-3400	(401) 732-3499	ang@spectrum-analytical.com	CDESS-QAPP-09

QAPP Worksheet #4-1
Project Personnel Sign-Off Sheet

Organization: Sevenson

Project Personnel	Title	Telephone Number	Signature	Date
Kim Lickfield	PM	(908) 769-5301		9-10-12
William Zambrana	CQCSM	(908) 769-5301		9/6/12
Ken Paisley	Regulatory Specialist	(716) 284-0431		9/6/12
Jennifer Singer	Data Quality Control Review Chemist	(716) 284-0431	Jennifer A. Singer	9/6/12
Al LaGreca	Program Manager	(716) 284-0431		9/6/12

QAPP Worksheet #4-2
Project Personnel Sign-Off Sheet

Organization: USEPA

Project Personnel	Title	Telephone Number	Signature	Date
Diego Garcia	RPM	(212) 637-4947		

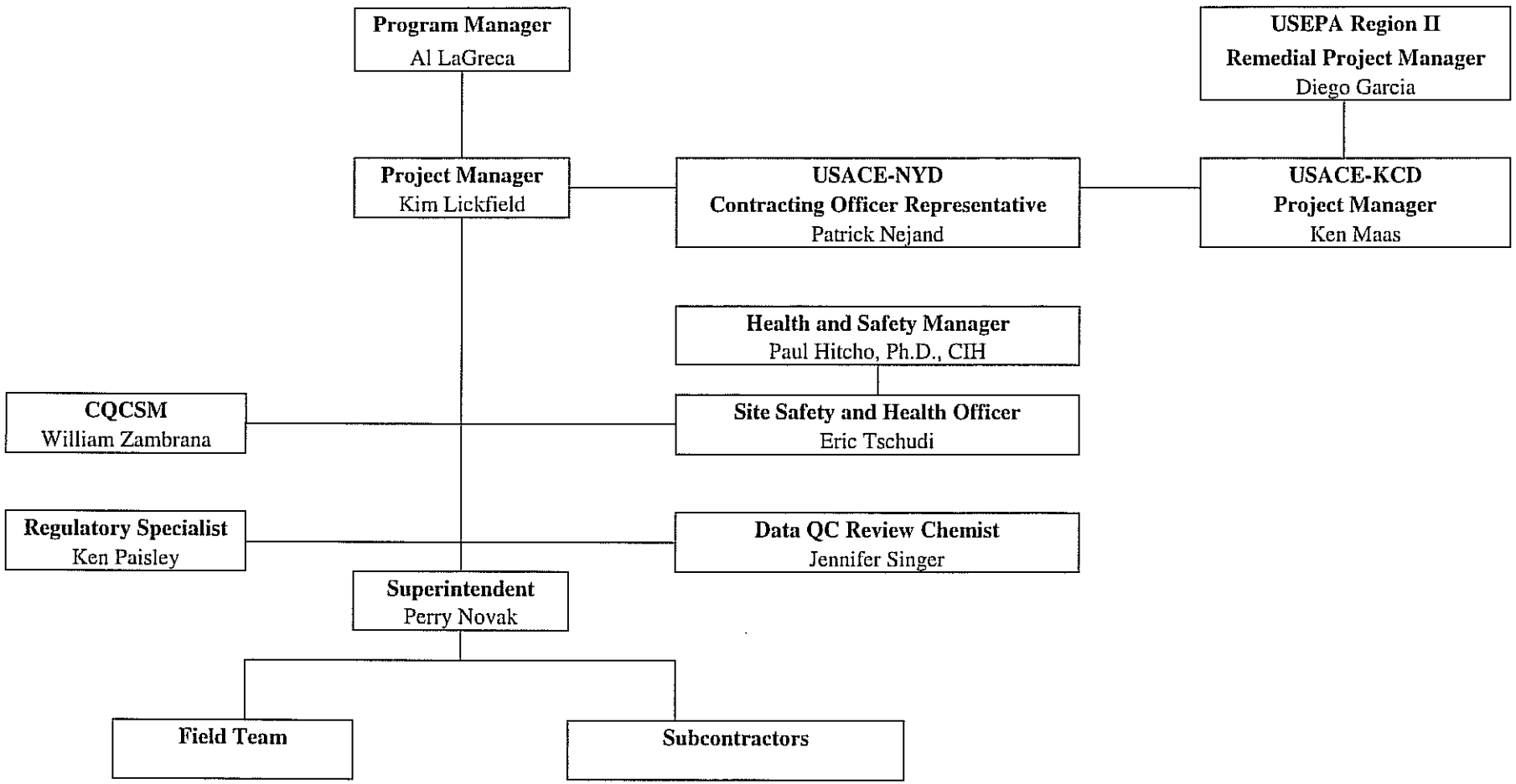
QAPP Worksheet #4-3
Project Personnel Sign-Off Sheet

Organization: USACE

Project Personnel	Title	Telephone Number	Signature	Date
Amy Darpinian	Project Chemist	(816) 389-3897		
Patrick Nejand	COR	(732) 846-5830		
Paula Higgins	Chief NYD Safety	(212) 264-9050		
Chris Nastasi	Project Engineer	(732) 846-5830		

QAPP Worksheet #5
Project Organizational Chart

The organizational chart and the description of project organization and the roles of the team members are summarized below:



Project/Task Organization Overview

The project management team will consist of representatives from USEPA Region II, USACE-KCD, USACE-NYD, NJDEP, and Sevenson. USACE-KCD holds the contract obligations for the project, while USACE-NYD is overseeing the operations aspect of the contract on behalf of USACE-KCD. USEPA and USACE will provide technical oversight to the project and contract management guidance to Sevenson. NJDEP will provide the USEPA with State approval. Sevenson will be the primary contractor and will be responsible for developing and implementing the remedial action and will provide project management to other subcontractors.

Cornell-Dubilier Site Team Members

This section contains a description of the project organizational structure. Diego Garcia is the USEPA RPM with responsibility for the site. Ken Maas is the USACE PM. Sevenson will be the primary contractor and will provide project management to other subcontractors.

Sevenson Home Office Personnel

Paul Hitcho, PhD, CIH –Health and Safety Manager. Dr. Hitcho is a Certified Industrial Hygienist (CIH) with over 20 years experience in managing health and safety issues for government and private remedial projects. Dr. Hitcho will be responsible for review and approval of the Site Safety, Health, and Emergency Response Plan (SSHERP). He will also provide Site Safety and Health Officer (SSHO) supervision, present initial site-specific training to all Site personnel, perform the respirator qualitative fit tests, and develop the air-monitoring program. He will conduct quarterly safety audits/inspections.

Al LaGreca – Program Manager. Mr. LaGreca will be ultimately responsible for the project's success. He will make available all Sevenson resources required to complete the project successfully. He will be kept informed of the project's progress and whether or not the contract is meeting its goals. Mr. LaGreca will resolve problems that cannot be resolved by the Project Manager or the Site Superintendent. He will periodically visit the site and become acquainted with field personnel and other representatives. It is anticipated Mr. LaGreca will be onsite once a month.

Kenneth Paisley, CHMM – Regulatory Specialist/Waste Disposal Coordinator. Mr. Paisley is committed to overseeing all field sampling and data acquisition plans, as well as interfacing with offsite laboratory concerns. Mr. Paisley will review laboratory reports with the selected laboratory in order to ensure compliance with project specifications and all required protocols. He will coordinate offsite waste removal, including transport, disposal, manifesting, waste profiles, regulatory compliance, and disposal requirements.

Jennifer Singer, REM – Data Quality Control Review Chemist. The Data Quality Control Review Chemist will support the CQCSM. Ms. Singer will perform a data review of all analytical data reports received from the laboratory prior to the submission of the data to the USACE and prior to preparation and completion of the chemical data reporting.

Sevenson Field Personnel

Kim Lickfield – Onsite Project Manager. The responsibilities of the Project Manager will include:

- Subcontractor coordination and oversight.
- Acting as liaison between Sevenson, USACE, and USEPA.
- Charge of all field operations.
- Hiring and termination/reassignment of personnel as necessary to support successful task order implementation.
- Management and coordination of all aspects of the project as defined in the Contract Specifications with an emphasis on adhering to the objectives of the remedial activities.
- Assuring corrective actions are taken for deficiencies cited during audits of sampling/analytical activities.
- Project coordination to implement and comply with the UFP-QAPP in coordination with the USACE, CQCSM, and Environmental Samplers, including the coordination of field and laboratory schedules pertaining to relevant operation/sampling activities and allocation of resources and staffing to implement the quality assurance (QA) and quality control (QC) program.
- Implementation of the SSHERP, including temporarily suspending field activities if the health and safety of personnel are endangered and/or temporarily suspending an individual for field activities for infractions of the SSHERP, pending further consideration by the Health and Safety Director.
- Review of all documents prepared by project personnel, including all relevant field records and logs.

William Zambrana – Contractor Quality Control Systems Manager. As CQCSM, Mr. Zambrana will report directly to the Project Manager on matters concerning quality control. He will have both the authority and the duty to stop whatever operation appears to be out of compliance with the contract documents. The CQCSM is responsible for field chemistry and environmental sampling staff, and responsibility for all records related to personnel, supplies, equipment use, equipment calibration, and waste transportation and disposal.

Eric Tschudi – Site Health and Safety Officer. As SSHO, Mr. Tschudi will report directly to the Corporate Health and Safety Director and be responsible for the implementation of Sevenson's approved SSHERP, including conducting required safety inspections, safety briefings, and reports of safety-related activities.

QAPP Worksheet #6
Communication Pathways

Communication Drivers	Responsible Entity	Name	Phone Number	Procedure
Communication with USEPA	USEPA RPM	Diego Garcia	(212) 637-4947	Primary point of contact with USEPA; can delegate communication to other internal or external points of contact; provides direction to USACE PM; communicates with NJDEP Case Manager.
Communication with USACE (lead agency - contracting)	USACE-KCD PM	Ken Maas	(816) 983-3709	Primary point of contact for USACE regarding contracting
Communication with USACE (lead agency – operations)	USACE-NYD COR	Patrick Nejand	(732) 846-5830	Primary point of contact with USACE regarding field operations; receives direction from USACE Contracting Officer; receives direction from USEPA RPM; provides direction to Sevenson.
UFP-QAPP Amendments	Sevenson	Jennifer Singer	(716) 284-0431	Sevenson Project Manager and CQCSM will initiate changes in the UFP-QAPP. Jennifer Singer will be responsible for revisions to the document. USACE and USEPA must approve all changes prior to implementation. Copies of amendments will be forwarded to all parties.
Change to Field Work	Sevenson	Field Team Leader	(908) 769-5301	Field Team Leader will notify Project Manager and CQCSM of any field variations. Project Manager will in turn notify USACE within 24 hours. Telephone and e-mail notifications are acceptable. All field changes will be documented as detailed in Worksheet #32.
Analytical Data Reporting	Sevenson	Jennifer Singer	(716) 284-0431	Jennifer Singer will review all analytical data. Any deficiencies will be reported to the Project Manager and laboratory Quality Assurance Officer.
Initiation of Corrective Action	Sevenson	William Zambrana	(908) 769-5301	Sevenson Project Manager and/or Data Quality Control Review Chemist will notify CQCSM of any issues and/or deficiencies who will in turn determine whether the need for corrective action is warranted.
Health and Safety	Sevenson	Eric Tschudi	(908) 769-5301	The SSHO will be responsible for ensuring the protocols specified in the SHERP are carried out during field activities. All safety matters will be reported to the SSHO who will in turn inform the Project Manager. If any issues arise during the field activities that the SSHO cannot address, the Corporate Health and Safety Manager, Dr. Paul Hitcho, will be immediately contacted.
Daily Field Sampling Paperwork	Sevenson	William Zambrana	(908) 769-5301	William Zambrana will e-mail or fax daily field sampling paperwork to the Project Manager and Data Quality Control Review Chemist within 2 business days.
Release of Analytical Data	Sevenson	Jennifer Singer William Zambrana	(716) 284-0431 (908) 769-5301	No analytical data can be released until Jennifer Singer has completed the data review and William Zambrana has approved the release.

Communication Drivers	Responsible Entity	Name	Phone Number	Procedure
Reporting Laboratory Data Quality Issues	Spectrum	Agnes Huntley	(401) 732-3400	The laboratory will report all QA/QC issues with project field samples to the CQCSM and Data Quality Control Review Chemist within 2 business days.

QAPP Worksheet #7
Personnel Responsibilities and Qualifications Table

Name	Title	Organizational Affiliation	Responsibilities	Education and Experience Qualifications
Al LaGreca	Program Manager	Sevenson	Oversees project and responds to USEPA and USACE	B.S. Civil Engineering
Kim Lickfield	PM	Sevenson	Manages project – coordinates between lead agency and subcontractors	A.A.S. Construction Technology
William Zambrana	CQCSM	Sevenson	QC oversight	A.S. – Radiation Technology
Jennifer Singer	UFP-QAPP Preparer and Data Quality Control Review Chemist	Sevenson	Prepares UFP-QAPP and performs data review	M.S.- Environmental Pollution Control B.S. – Biochemistry Registered Environmental Manager (REM) certification
Eric Tschudi	SSHO	Sevenson	Oversees health and safety for field activities	11 years Health and Safety experience
Ken Paisley	Regulatory Specialist/Waste Disposal Coordinator	Sevenson	Coordination of offsite waste removal	B.S. – Biology Certified Hazardous Materials Manager (CHMM) certification

QAPP Worksheet #8
Special Personnel Training Requirements Table[1]

Project Function	Specialized Training By Title or Description of Course	Training Provider	Training Date	Personnel/Groups Receiving Training	Personnel Titles/Organizational Affiliation	Location of Training Records/Certificates[2]
All Field Activities[3]	40-hour Annual 8-hour refresher	Sevenson	Various and Updated	All field team members	Sevenson staff, subcontractors	Sevenson database and onsite
Sample Collection	Trained in USEPA, USACE, and NJDEP standard sampling methods	Sevenson	Various and Updated	All field team members	Sevenson staff, subcontractors	Resumes
Sample Analysis	Trained in Department of Defense (DOD) Quality Systems Manual (QSM) and USEPA SW-846 methods	Project Laboratory	Various and Updated	Project Laboratory	All personnel	Laboratory
Data Review and Assessment	None – review performed by an experienced project chemist	Sevenson	Various	Jennifer Singer	Sevenson Data Quality Control Review Chemist	Sevenson database

[1] Other tasks requiring specialized skills and training will be performed by appropriately qualified subcontractors. Training, certification, and permit requirements will be outlined in separate scopes of work for each task.
[2] If training records and/or certificates are on file elsewhere, document their location in this column. If training records and/or certificates do not exist or are not available, then this should be noted.
[3] All field personnel will be required to be Occupational Safety and Health Administration (OSHA) trained.

QAPP Worksheet #9
Project Scoping Session Participants Sheet

Site Name: Cornell-Dubilier Electronics Superfund Site
Site Location: South Plainfield, New Jersey
Project Name: Operable Unit 1 Soil Remediation
Projected Date(s) of Sampling: July – December 2012
Project Manager: Kim Lickfield

Date of Session: May 2012, June 2012
Scoping Session Purpose: Discuss preparation of UFP-QAPP and subsequent responses to the USACE Project Chemist comments

Name	Title	Affiliation	Phone #	E-mail Address	Project Role
Jennifer Singer	Project Chemist	Sevenson	(716) 284-0431	jsinger@sevenson.com	UFP-QAPP Preparation
Ken Paisley	Regulatory Specialist	Sevenson	(716) 284-0431	kpaisley@sevenson.com	Regulatory Specialist
Kim Lickfield	Project Manager	Sevenson	(908) 769-5301	klickfield@sevenson.com	PM
William Zambrana	CQCSM	Sevenson	(908) 769-5301	wzambrana@sevenson.com	CQCSM
Amy Darpinian	Project Chemist	USACE	(816) 389-3897	Amy.f.darpinian@usace.army.mil	Project Chemist

May 2012: Sevenson internal discussion/e-mail correspondence regarding the scope of the project and completion of the UFP-QAPP.

May 5, 2012: E-mail correspondence received from Amy Darpinian following telephone conversation regarding the requirement to use the USEPA Field and Analytical Services Teaming Advisory Committee (FASTAC) process for lab procurement for project. USEPA Region 2's FASTAC analytical services strategy requires a tiered decision tree for procuring Superfund analytical services for all non-time critical data collection projects. The work described in this UFP-QAPP is time-critical, due to safety concerns with deep excavations at residential properties. Therefore, it was determined that a subcontracted laboratory would be procured that can meet the five-day turnaround time required for sample results.

June 16, 2012: E-mail correspondence received from Amy Darpinian regarding the requirement to submit data to the USEPA Region II database. The USEPA database does not require that backfill or waste characterization sample results be submitted for inclusion in the database; these are the only sample types expected to be collected by Sevenson. In the event that Sevenson collects any post-excavation soil samples (not anticipated at this time), the results will require submission to the USEPA Region II database.

QAPP Worksheet #10
Problem Definition

PROBLEM DEFINITION

The selected remedy involves the remediation of PCB contamination that is found on residential, commercial, and municipal properties located in the vicinity of the former Cornell-Dubilier Electronics facility. The following remedial action objectives for contaminated soil will address the human health risk and environmental concerns at residential, commercial, and municipal properties in the vicinity of the former Cornell-Dubilier Electronics facility:

- Reduce or eliminate the direct contact threat associated with contaminated soil to levels protective of current land use and considering potential future residential use.
- Prevent exposure and minimize disturbance to the surrounding community of South Plainfield during implementation of the remedial action.

USEPA is using 1 parts per million (ppm) as its Remediation Goal for this action.

A remedial design has been completed and the work included the sampling and analysis required to define the extent of the excavations to be performed under this UFP-QAPP. The remedial design had established three remediation areas to be addressed under the current action. Maps of the general locations of the areas in relation to the former Cornell-Dubilier Electronics facility, as well as specific excavation plans for each area are included in Appendix 1. Large plots of the figures included in Appendix 1 are available onsite and should be referenced for all field activities. The remediation areas are as follows:

- **Property 108, 129, 301, and 303** is located along Hamilton Boulevard and Delmore Avenue. There are eight excavation areas within the property grouping, with excavation depths ranging from 0" to 6" below ground surface (bgs), to 0" to 30" bgs (see Figure 1A, included in Appendix 1). The volume of the excavation is approximately 339 cubic yards (yd^3).
- **Property 116 and 302** is located between Delmore Avenue and Arlington Avenue. There are three excavation areas within the property grouping with excavation depths ranging from 0" to 6" bgs, to 0" to 24" bgs (see Figure 2A, included in Appendix 1). The volume of the excavation is approximately $52yd^3$.
- **Property 128, 304, and 305** is located along Harvard Avenue, Jackson Avenue, and Garibaldi Avenue. There are four excavation areas within the property grouping with excavation depths ranging from 0" to 24" bgs, to 0" to 48" bgs (see Figure 3A, included in Appendix 1). The volume of the excavation is approximately $2,105yd^3$.

If additional properties are identified which require remediation under this contract, an addendum to the UFP-QAPP will be submitted, including all applicable Worksheets.

PROJECT DESCRIPTION

This task addresses the remediation of soils associated with OU-1 of the site. The USEPA signed a ROD for the site in September 2003. The objectives of the current remedial action are:

- Excavation of approximately $2,500yd^3$ of contaminated soil, backfilling with clean fill, and property restoration, as necessary.
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary.

Constituents to be sampled include:

- Fill materials from offsite sources will be sampled and analyzed to prior to bringing it onsite.
- In-situ soil samples will be collected from the excavation areas in accordance with disposal facility criteria.
- Water removed from excavations and decontamination activities will be placed in a storage tank and analyzed in accordance with disposal facility criteria.

PROJECT DECISION CONDITIONS

Samples of topsoil and backfill materials from each offsite source will be collected and analyzed to verify that these materials do not contain contaminant levels that are hazardous to human health or the environment. Written approval from USACE will be received prior to bringing backfill or topsoil to the site. NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS; NJAC 7:26D, May 2012) will be used to determine if borrow materials are free from chemical contamination. NJDEP Unrestricted Use Standards for Radioactive Contamination (NJAC 7:28-12, September 2009) will be used to determine if borrow materials are free from naturally occurring radioactive material (NORM). If the borrow materials contain concentrations of chemical or NORM greater than the applicable criteria, the source will be rejected. A new borrow source will be located and sampled for suitability.

Soil and water samples will be collected for waste characterization and disposal facility approval. Waste characterization sample results will be compared against the 40CFR261 *Characteristics of Hazardous Waste* and 40CFR761 *PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* to determine the disposal requirements. Any materials containing Resource Conservation and Recovery Act (RCRA) regulated constituents at concentrations greater than toxicity characteristic leachate procedure (TCLP) criteria will be disposed of as RCRA hazardous waste. Any materials containing concentrations of total PCBs greater than the regulatory standards will be disposed of as Toxic Substance Control Act (TSCA) regulated PCB remediation wastes. Any materials exceeding both criteria will be disposed of as RCRA/TSCA waste.

QAPP Worksheet #11
Project Quality Objectives/Systematic Planning Process Statements

WHO WILL USE THE DATA?

USEPA Region II, USACE-KCD, USACE-NYD, and Sevenson will use the data.

WHAT WILL THE DATA BE USED FOR?

- Backfill materials brought onsite will be sampled and analyzed to verify that the soil is clean for the intended use.
- Waste characterization samples will be collected and analyzed to assess suitability for disposal of waste soil, debris, and waste water. Analytical results from these samples will be submitted to the disposal facility to adequately classify waste materials.

WHAT TYPES OF DATA ARE NEEDED?

A table summarizing the Data Needs and Data Uses is included in Appendix 2.

HOW "GOOD" DO DATA NEED TO BE?

The data must be technically defensible and of sufficient quality as to support the project data quality objectives (DQO) which are described in Appendix 3. See Worksheet #15 which summarizes the analytes with the associated project action levels and project quantitation limits.

Analytical methods are planned to be definitive data quality. Definitive data is defined as data that are suitable for final decision making. They are generated using rigorous analytical methods such as approved USEPA SW-846 reference methods. Definitive data are not restricted in their use unless quality problems require data qualification resulting in unusable data.

WHEN WILL DATA BE COLLECTED?

Data will be collected over the duration of the project. It is expected that samples will be collected beginning in the summer 2012 per the project schedule included in Worksheet #16. The estimated number of samples to be collected at each sampling location is described in Worksheet #20.

WHO WILL COLLECT AND GENERATE THE DATA?

The Sevenson sampling team will collect all the samples. The samples will be analyzed for chemical parameters by a NJDEP and DOD Environmental Laboratory Accreditation Program (ELAP) certified subcontracted laboratory. Analytical data will be managed by Sevenson.

HOW WILL THE DATA BE REPORTED?

The data will be reported by the subcontracted laboratory to Sevenson. Sevenson will provide the data to USACE and USEPA for immediate use/decision making in an excel spreadsheet. Full laboratory data reports will be delivered directly to Sevenson for data review. Following receipt of the validated and/or reviewed data, Sevenson will generate a Quality Control Summary Report (QCSR). The QCSR will include a summary of all chemical sampling activities and will include an evaluation of the achievement of project DQO. In addition, analytical data will be reported electronically in a manner that is equivalent or may be transformed into a format consistent with the Electronic Data Deliverable (EDD) format

specified by USEPA Region II, as documented in *Electronic Data Deliverable (EDD) Comprehensive Specification Manual 1.1 (November 2007)*, and current updates. It is anticipated that the EDD will be reported by the subcontracted laboratory in USACE Automated Data Review (ADR) format. Following review of the data using the ADR software, the data will be maintained in the USACE Environmental Data Management System (EDMS) database, which will allow for generation of the data in the USEPA Region II EDD format. Hardcopy analytical data will meet USACE EM200-1-6 *Chemical Quality Assurance for HTRW Projects (October 1997)*. In addition, as required by USEPA Region II, Sevenson will adhere to the Analytical Services Tracking System (ANSETS) reporting requirement for all work performed by the subcontracted laboratory.

HOW WILL THE DATA BE ARCHIVED?

Electronic data will be archived in the EDMS project database to be maintained by Sevenson. As stated, sample results will be provided to USEPA for final upload to their systems in a manner consistent with the requirements of *Electronic Data Deliverable (EDD) Comprehensive Specification Manual 1.1 (November 2007)*, and current updates. Hard copies of laboratory reports will also be kept in the Sevenson project files. Data will be transferred to the USACE upon completion of the project. Retrieval of data by others will be at the discretion of the USACE and the USEPA. The length of time that records will be archived will be at the discretion of the USACE and the USEPA.

QAPP Worksheet #12
Measurement Performance Criteria Table

Precision, Accuracy, Representativeness, Completeness, and Comparability

To measure and control the quality of analyses, certain QA parameters are defined and utilized in data analysis activities. These parameters are defined below.

Precision. Precision measures the reproducibility of data or measurements under specific conditions. Precision in a quantitative measure of the variability of a group of data compared to their average value. Duplicate precision is stated in terms of relative percent difference (RPD) of absolute difference between two measurements. Measurement of precision is dependent upon sampling technique and analytical method. Field duplicate and laboratory duplicate samples will be used to measure precision for project samples. Both sampling and analysis will be as consistent as possible.

For chemical determinations, laboratory and field duplicate precision is stated in terms of RPD of absolute difference between two measurements. For a pair of measurements, RPD (or absolute difference) will be used, as presented below:

$$RPD = \left(\frac{|X_1 - X_2|}{\frac{(X_1 + X_2)}{2}} \right) \times 100$$

Where: X_1 and X_2 = the two replicate values

For radiological determinations, normalized absolute difference (NAD) is used to statistically determine the number of units of standard error of difference between means and the measured results differ from zero. NAD is calculated as presented below:

$$\text{NAD} = \frac{|\text{sample} - \text{replicate}|}{\sqrt{(U_{\text{sample}})^2 + (U_{\text{replicate}})^2}}$$

Where: Sample = concentration in the first sample (original)
Replicate = concentration in second sample (replicate)
U_{sample} = uncertainty of the sample
$U_{replicate}$ = uncertainty of the replicate

If the RPD or NAD acceptance criteria for field or laboratory duplicate samples are not achieved, field-sampling procedures will be reviewed with sampling personnel. In addition, the laboratory will be made aware of the discrepancy such that they may review internal sample preparation and analysis procedures.

Accuracy. Accuracy measures the bias in a measurement system. Sources of error include the sampling process, field contamination, preservation, handling, shipping, sample matrix, sample preparation, and analysis technique. Analytical accuracy will be assessed through surrogate spikes, matrix spikes, and laboratory control samples. In general, accuracy is measured in terms of percent recovery:

$$\%R = \frac{|SSR - SR|}{SA} \times 100$$

Where: SSR = measured value of the spiked sample
SR = measured value of the unspiked sample
SA = known amount of the spike in the sample

Representativeness. Representativeness expresses the degree to which data accurately and precisely reflects a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Representativeness is a qualitative parameter that is dependent upon the proper design and implementation of the sampling program and proper laboratory protocol. The sampling design created for this project was designed to provide data representative of site conditions. During development of the sampling designs, consideration was give to the past history of contamination at the site, existing analytical data, physical setting, and process. Representativeness will be satisfied by determining that the UFP-QAPP is followed, proper sampling techniques, preservation, and handling are used, proper analytical procedures are followed, and holding times for the samples are not exceeded in the laboratory.

Completeness. Completeness is a measure of the amount of usable data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. It is expected that the laboratory used for this project will provide data that meet the QC acceptance criteria for 90 percent, or more, of all samples analyzed. Following the completion of the analytical testing, the percent completeness will be calculated using the following equation:

$$\%C = \left(\frac{V}{N}\right) \times 100$$

Where: V = number of measurements judged valid
N = total number of sample results

The data review process will be used to determine the quality and quantity of usable analytical data generated.

The completeness acceptance criterion for samples collected in the field will be 90 percent of the quantity of samples planned for collected in the UFP-QAPP. Corrective action may be implemented to recollect samples where necessary and possible (e.g., modifying a planned sample location, sample jars broken during shipment). Laboratory notification of sample receipt conditions will be used to determine, as soon as possible, whether any problems during sample shipment would necessitate recollection of samples.

Comparability. Comparability expresses the confidence with which one data set can be compared to another. The extent to which existing and planned analytical data will be comparable depends on the similarity of sampling and analytical methods. The procedures used to obtain the planned analytical data are expected to provide comparable data. The procedures used will be USEPA promulgated methods, well recognized and commonly used for environmental investigations.

Desired Method Sensitivity. Depending upon the use to the data and the type of test parameter, specific quantitation limits (QLs) will be required. Worksheet #15 lists the required QLs. In each case, the QLs are well below the project action levels which are also listed or referenced.

QAPP Worksheet #12-1
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	Metals, Cyanide
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	Data Quality Indicators (DQIs)	Measurement Performance Criteria (MPC)	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	100.0004 100.0012 100.0111	Accuracy	Recovery: 80-120%	Matrix Spike (MS)	A
		Precision	RPD: ≤20%	Laboratory Duplicate	A
		Accuracy	Recovery: 80-120%	Laboratory Control Sample (LCS)	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ reporting limit (RL) and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Sensitivity, Accuracy	No analytes detected > limit of detection (LOD)	Calibration Blank	A
		Accuracy	ICS-A: Absolute value of concentration for all non-spiked analytes <LOD ICS-AB: within ±20% of true value	Interference Check Sample (ICS; method SW846 6010C only)	A
		Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample	Serial Dilution	A
		Accuracy	Recovery: 75-125%	Post-Digestion Spike (PDS; method SW846 6010C only)	A
		Accuracy	Recovery: 85-115%	Recovery Test (method SW846 7471B only)	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-2
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	VOCs, Semi-Volatile Organic Compounds (SVOCs), Pesticides, PCBs
Concentration Level	Trace (VOCs,), Low (SVOCs, Pesticides, PCBs)

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	60.0003 60.0006 70.0011 90.0012	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/Matrix Spike Duplicate (MSD)	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Surrogate Spikes	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-3
Measurement Performance Criteria Table

Matrix	Offsite Backfill
Analytical Group	Radiological Parameters
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-1	PGH-R-023-5	Precision	NAD≤3.92	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Sensitivity	≤RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-4
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP Metals (solid waste characterization to also include copper, nickel, and zinc)
Concentration Level	Low to Medium

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	100.0012 100.0111	Accuracy	Recovery: 80-120%	MS	A
		Precision	RPD: ≤20%	Laboratory Duplicate	A
		Accuracy	Recovery: 80-120%	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Sensitivity, Accuracy	No analytes detected > LOD	Calibration Blank	A
		Accuracy	ICS-A: Absolute value of concentration for all non-spiked analytes <LOD ICS-AB: within ±20% of true value	ICS (method SW846 6010C only)	A
		Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample	Serial Dilution	A
		Accuracy	Recovery: 75-125%	PDS (method 846 6010C only)	A
		Accuracy	Recovery: 85-115%	Recovery Test (method SW846 7471B only)	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-5
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, PCBs
Concentration Level	Low to High

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	60.0003 60.0006 60.0034 70.0011 90.0012	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	MS/MSD	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Surrogate Spikes	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	No analytes detected > ½ RL and greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater)	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-6
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Reactivity (Sulfide and Cyanide)
Concentration Level	Low

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheets #17-2 and #17-3	100.0015	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Sensitivity, Accuracy	All target compounds ≤ RL	Method Blank	A
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-7
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Ignitability
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC[1]	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	100.0024	Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	Laboratory Duplicate	A
		Accuracy	Must meet laboratory in-house control limits. (Appendix 4)	LCS	A
		Accuracy	4±2°C	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #12-8
Measurement Performance Criteria Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	pH
Concentration Level	NA

Sampling Procedure	Analytical Method/SOP	DQIs	MPC	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
Worksheet #17-2 and #17-3	100.0112	Sensitivity	Must agree within ±0.10 pH unit of true value	Initial Calibration Verification	A
		Sensitivity	±0.05 pH unit of the temperature adjusted pH value	Continuing Calibration Verification	A
		Precision	Must agree within ±0.10 pH units	Laboratory Duplicate	S&A
		Accuracy	4±2°C	Temperature Blank	S
		Completeness	≥90%	Data Assessment	S&A
		Comparability	Similar units and methods	Data results review	S&A

QAPP Worksheet #13
Secondary Data Criteria and Limitations Table

Secondary Data	Data Source (Originating Organization, Report Title, and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used	Limitations on Data Use
Specifications and Drawings	Arcadis/Malcolm Pirnie, 2012	Arcadis/Malcolm Pirnie	Historical data that will define the limits of the soil excavations	None for the current intended project objectives
Historical Data	USEPA Region II, September 2003. "Record of Decision" Cornell-Dubilier Electronics Superfund Site, OU-1, South Plainfield, New Jersey.	Foster Wheeler Environmental Corporation, August 2001. "Final Remedial Investigation Report for Operable Unit 1 (OU-1) Offsite Soils, for Cornell-Dubilier Electronics Superfund Site, South Plainfield, Middlesex County, New Jersey." Foster Wheeler Environmental Corporation, August 2001. "Final Feasibility Study Report for Operable Unit 1 (OU-1) Offsite Soils, for Cornell-Dubilier Electronics Superfund Site, South Plainfield, Middlesex County, New Jersey."	Historical data that will define the limits of the soil excavations	None for the current intended project objectives

QAPP Worksheet #14
Summary of Project Tasks

Sampling Tasks: Samples will be collected for analytical parameters from the locations described in Worksheets #17 and #18 per the instructions in Worksheet #17. The following list represents the types of samples to be collected during the course of field activities:

- **Offsite Topsoil/Backfill Sampling.** Backfill material obtained from offsite sources will be tested for chemical parameters prior to use in order to determine that the materials do not present a threat to human health and/or the environment.
- **Solid Waste Characterization Sampling.** Waste characterization samples will be collected from excavated soil and debris for waste characterization and disposal facility approval. More specific information on solid waste disposal can be found in the Transportation and Disposal Plan, submitted under separate cover.
- **Wastewater Characterization Sampling.** Wastewater generated during site activities (e.g., decontamination water, storm water) will be containerized in an aboveground storage tank and samples will be collected to determine the waste management approach.

Analysis Tasks: Analytical methodologies are described in Worksheets #19 and #23. The following list represents the analysis required for each sample type to be collected during the course of field activities:

- **Offsite Topsoil/Backfill Sampling.** Laboratory analysis will be performed on these samples for metals, cyanide, VOCs, SVOCs, pesticides, PCBs, and radiological parameters, according to NJAC 7:26D (May 2012), NJAC 7:28-12 (September 2009), and NJAC 7:26E (May 2012).
- **Solid Waste Characterization Sampling.** Laboratory analysis will be performed on these samples for corrosivity, ignitability, hydrogen cyanide reactivity, hydrogen sulfide reactivity, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, and total PCBs. Additional analyses may be performed at the direction of the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.
- **Wastewater Characterization Sampling.** Laboratory analysis will be performed on these samples for corrosivity, ignitability, hydrogen cyanide reactivity, hydrogen sulfide reactivity, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, and total PCBs. Additional analyses may be performed at the direction of the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.

Quality Control Tasks: The analytical laboratories will be required to analyze QC samples listed in the documents and procedures give in Worksheet #28. Laboratory analytical data will undergo internal reviews and validation prior to release of the analytical data reports and EDDs. Sevenson will also review laboratory analytical data as described in Worksheets #31 and #36.

In addition, the field sampling team will be required undergo internal QC assessments, including review of field sampling activities, documentation, and health and safety compliance as described in Worksheet #31.

Secondary Data: Reports and analytical data associated with prior investigations are defined in Worksheet #13. These documents have been reviewed by Sevenson and their contents utilized in the development of the UFP-QAPP for the current scope of work.

Data Management Tasks: Both hard copy and electronic data deliverables will be tracked, stored, handled, and managed. All data, field notes, and analytical information will be placed in an electronic database which will be maintained in the Sevenson corporate office. All electronic data will be backed up. Hardcopies of data will be stored in project files.

Documentation and Records: All hardcopy data (e.g., field notebooks, photos, hard copies of chain of custody forms, airbills, etc.) will be taken to the Sevenson corporate office and kept in the project files.

Assessment/Audit Tasks: Planned project assessments are defined in Worksheet #31. Audits of field staff compliance with project standard operating procedures (SOPs) will be performed within the first week of sample collection and periodically thereafter as determined by the Project CQCSM or the field team leader. Checklists used during field audits, including task-specific quality control checklists, are included in Appendix 5. Audits of laboratory compliance with SOPs will be performed on a periodic basis as determined by the laboratory QA manager. In addition, laboratory data will be audited as part of the data validation process as defined in this UFP-QAPP. The laboratory may be audited onsite by Sevenson at any time based on need determined by the Sevenson project chemist.

Subcontracted laboratories will maintain current requirements for certification required by NJDEP and DOD ELAP.

Data Review Tasks: Chemical data that is generated will be reviewed by Sevenson against the criteria in the applicable analytical SOP. See also Worksheets #23, #28, #35, and #36.

Data review by Sevenson will include, but may not be limited to, the following parameters:

- Data completeness
- Holding time
- Laboratory control samples
- Method blanks
- Surrogate spikes
- Matrix spike and matrix spike duplicates
- Laboratory and field duplicates
- Initial and continuing calibration (PCBs only)

A QCSR will be provided to summarize the results of the data review findings and to present conclusions regarding the usability of the data for project objectives. The report will assess the accuracy, precision, representativeness, comparability, and completeness of the data generated. The report will focus on out of control data results and present a table of non-compliant results that exceeded some QC requirement.

QAPP Worksheet #15-1
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: VOCs
Concentration Level: Trace

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Acetone	67-64-1	70,000,000	10	NA	NA	3.5	5
Acrolein	107-02-8	500	500	NA	NA	5.1	25
Acrylonitrile	107-13-1	900	500	NA	NA	1.2	5
Benzene	71-43-2	2,000	5	NA	NA	0.86	5
Bromodichloromethane	75-27-4	1,000	5	NA	NA	1.1	5
Bromoform	75-25-2	81,000	5	NA	NA	1.4	5
Bromomethane	74-83-9	25,000	5	NA	NA	1.4	5
2-Butanone	78-93-3	3,100,000	10	NA	NA	2.8	5
Carbon Disulfide	75-15-0	7,800,000	500	NA	NA	0.66	5
Carbon Tetrachloride	56-23-5	600	5	NA	NA	1.1	5
Chlorobenzene	108-90-7	510,000	5	NA	NA	0.96	5
Chloroethane	75-00-3	220,000	5	NA	NA	1.7	5
Chloroform	67-66-3	600	5	NA	NA	0.82	5
Chloromethane	74-87-3	4,000	5	NA	NA	0.74	5
Dibromochloromethane	124-48-1	3,000	5	NA	NA	0.77	5
1,2-Dibromo-3-chloropropane	96-12-8	80	5	NA	NA	0.67	5
1,2-Dibromoethane	106-93-4	8	5	NA	NA	1.5	5
1,2-Dichlorobenzene	95-50-1	5,300,000	5	NA	NA	0.44	5
1,3-Dichlorobenzene	541-73-1	5,300,000	5	NA	NA	0.30	5
1,4-Dichlorobenzene	106-46-7	5,000	5	NA	NA	0.25	5
Dichlorodifluoromethane	75-71-8	490,000	5	NA	NA	3.6	5
1,1-Dichloroethane	75-34-3	8,000	5	NA	NA	0.94	5
1,2-Dichloroethane	107-06-2	900	5	NA	NA	0.9	5
1,1-Dichloroethene	75-35-4	11,000	5	NA	NA	0.98	5
cis-1,2-Dichloroethene	156-59-2	230,000	5	NA	NA	1.2	5
trans-1,2-Dichloroethene	156-60-5	300,000	5	NA	NA	1.1	5

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
1,2-Dichloropropane	78-87-5	2,000	5	NA	NA	1.2	5
1,3-Dichloropropene (cis and trans)	10061-01-5 (cis) 10061-02-6 (trans)	2,000	5	NA	NA	0.62 (cis) 1 (trans)	5 (cis) 5 (trans)
Ethylbenzene	100-41-4	7,800,000	5	NA	NA	1.2	5
Methyl Acetate	79-20-9	78,000,000	5	NA	NA	1.4	5
Methylene Chloride	75-09-2	34,000	5	NA	NA	0.64	5
Methyl tert-butyl ether	1634-04-4	110,000	5	NA	NA	0.77	5
Styrene	100-42-5	90,000	5	NA	NA	1.1	5
Tertiary Butyl Alcohol	75-65-0	1,400,000	100	NA	NA	5	10
1,1,2,2-Tetrachloroethane	79-34-5	1,000	5	NA	NA	1.1	5
Tetrachloroethene	127-18-4	2,000	5	NA	NA	1.2	5
Toluene	108-88-3	6,300,000	5	NA	NA	0.54	5
1,2,4-Trichlorobenzene	120-82-1	73,000	5	NA	NA	0.33	5
1,1,1-Trichloroethane	71-55-6	290,000	5	NA	NA	0.76	5
1,1,2-Trichloroethane	79-00-5	2,000	5	NA	NA	0.66	5
Trichloroethene	79-01-6	7,000	5	NA	NA	0.77	5
Trichlorofluoromethane	75-69-4	23,000,000	5	NA	NA	2.6	5
Vinyl Chloride	75-01-4	700	5	NA	NA	1	5
Xylenes (total)	1330-20-7	12,000,000	5	NA	NA	1.1	5

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, May 2012).

[2] The project quantitation limits are based the soil practical quantitation limit (PQL) listed in NJDEP RDCSRS (NJAC 7:26D, May 2012).

[3] Analytical method detection limits (MDLs) and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-2
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: SVOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Acenaphthene	83-32-9	3,400,000	200	NA	660	8.4	170
Acenaphthylene	208-96-8	NS	200	NA	660	10	170
Acetophenone	98-86-2	2,000	200	NA	ND	20	170
Anthracene	120-12-7	17,000,000	200	NA	660	19	170
Atrazine	1912-24-9	210,000	200	NA	ND	24	170
Benzaldehyde	100-52-7	6,100,000	200	NA	ND	49	170
Benzidine	92-87-5	700	700	NA	NA	61	170
Benzo(a)anthracene	56-55-3	600	200	NA	660	17	170
Benzo(a)pyrene	50-32-8	200	200	NA	660	25	170
Benzo(b)fluoranthene	205-99-2	600	200	NA	660	46	170
Benzo(g,h,i)perylene	191-24-2	380,000,000	200	NA	660	17	170
Benzo(k)fluoranthene	207-08-9	6,000	200	NA	660	19	170
1,1'-Biphenyl	92-52-4	3,100,000	200	NA	ND	17	170
Bis(2-chloroethyl)ether	111-44-4	400	200	NA	660	74	170
Bis(2-chloroisopropyl)ether	108-60-1	23,000	200	NA	660	0.33	170
Bis(2-ethylhexyl)phthalate	117-81-7	35,000	200	NA	660	8.6	170
Butyl benzyl phthalate	85-68-7	1,200,000	200	NA	660	6.3	170
Caprolactam	105-60-2	31,000,000	200	NA	ND	25	170
Carbazole	86-74-8	24,000	200	NA	ND	10	170
2-Chlorophenol	95-57-8	310,000	200	NA	660	17	170
Chrysene	218-01-9	62,000	200	NA	660	25	170
Dibenzo(a,h)anthracene	53-70-3	200	200	NA	660	5.8	170
3,3'-Dichlorobenzidine	91-94-1	1,000	200	NA	1,300	52	170
2,4-Dichlorophenol	120-83-2	180,000	200	NA	660	17	170
Diethyl phthalate	84-66-2	49,000,000	200	NA	660	7.8	170
2,4-Dimethylphenol	105-67-9	1,200,000	200	NA	660	53	170
di-n-Butyl phthalate	84-74-2	6,100,000	200	NA	ND	5.8	170

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
4,6-Dinitro-2-methylphenol[4]	534-52-1	6,000	300	NA	3,300	30	330
2,4-Dinitrophenol[4]	51-28-5	120,000	300	NA	3,300	100	330
2,4-Dinitrotoluene	121-14-2	700	200	NA	660	6	170
2,6-Dinitrotoluene	606-20-2	700	200	NA	660	8.8	170
di-n-Octylphthalate	117-84-0	2,400,000	200	NA	ND	44	170
1,2-Diphenylhydrazine	122-66-7	700	700	NA	NA	170	330
Fluoranthene	206-44-0	2,300,000	200	NA	660	18	170
Fluorene	86-73-7	2,300,000	200	NA	660	7.8	170
Hexachlorobenzene	118-74-1	300	200	NA	660	7.9	170
Hexachlorobutadiene	87-68-3	6,000	200	NA	660	32	170
Hexachlorocyclopentadiene	77-47-4	45,000	200	NA	660	32	170
Hexachloroethane	67-72-1	35,000	200	NA	660	96	170
Indeno(1,2,3-cd)pyrene	193-39-5	600	200	NA	660	8.9	170
Isophorone	78-59-1	510,000	200	NA	660	51	170
2-Methylnaphthalene	91-57-6	230,000	170	NA	660	20	170
2-Methylphenol	95-48-7	310,000	200	NA	660	23	170
4-Methylphenol	106-44-5	31,000	200	NA	660	22	170
Naphthalene	91-20-3	6,000	200	NA	660	23	170
2-Nitroaniline[4]	88-74-4	39,000	300	NA	3,300	5.5	330
Nitrobenzene	98-95-3	31,000	200	NA	660	18	170
N-Nitrosodimethylamine	62-75-9	700	700	NA	NA	36	170
N-Nitroso-di-n-propylamine	621-64-7	200	200	NA	660	68	170
N-Nitrosodiphenylamine	86-30-6	99,000	200	NA	660	47	170
Pentachlorophenol[4]	87-86-5	3,000	300	NA	3,300	82	330
Phenanthrene	85-01-8	NS	200	NA	660	6.9	170
Phenol	108-95-2	18,000,000	200	NA	660	29	170
Pyrene	129-00-0	1,700,000	200	NA	660	7.4	170
2,4,5-Trichlorophenol[4]	95-95-4	6,100,000	200	NA	660	53	330
2,4,6-Trichlorophenol	88-06-2	19,000	200	NA	660	26	170

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, May 2012). "NS" indicates that there is no criterion listed for the analyte.

[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, May 2012).

[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-3
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Pesticides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8081B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/Kg)	Method QLs (µg/Kg)	MDLs (µg/Kg)	QLs (µg/Kg)
Aldrin	309-00-2	40	2	NA	NA	0.15	1.7
Chlordane (alpha and gamma)	57-74-9	200	2	NA	NA	0.12 (alpha-) 0.11 (gamma-)	1.7 (alpha-) 1.7 (gamma-)
4,4'-DDD[4]	72-54-8	3,000	3	NA	NA	0.28	3.3
4,4'-DDE[4]	72-55-9	2,000	3	NA	NA	0.24	3.3
4,4'-DDT[4]	50-29-3	2,000	3	NA	NA	0.25	3.3
Dieldrin[4]	60-57-1	40	3	NA	NA	0.24	3.3
Endosulfan I and Endosulfan II[4]	115-29-7	470,000	3	NA	NA	0.035 (-I) 0.089 (-II)	1.7 (-I) 3.3 (-II)
Endosulfan sulfate[4]	1031-07-8	470,000	3	NA	NA	0.23	3.3
Endrin[4]	72-20-8	23,000	3	NA	NA	0.25	3.3
Alpha-BHC	319-84-6	100	2	NA	NA	0.11	1.7
Beta-BHC	319-85-7	400	2	NA	NA	0.13	1.7
Heptachlor	76-44-8	100	2	NA	NA	0.11	1.7
Heptachlor epoxide	1024-57-3	70	2	NA	NA	0.11	1.7
Gamma-BHC	58-89-9	400	2	NA	NA	0.11	1.7
Methoxychlor	72-43-5	390,000	20	NA	NA	2.2	17
Toxaphene	8001-35-2	600	200	NA	NA	5.5	170

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, May 2012).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, May 2012).
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-4
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: PCBs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/Kg)[1]	Project Quantitation Limit Goal (µg/Kg)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits[4]	
				MDLs (µg/Kg)	Method QLs (µg/Kg)[3]	MDLs (µg/Kg)	QLs (µg/Kg)
Aroclor 1016	12674-11-2	200	30	0.057-0.070	38-47	2.5	33
Aroclor 1221	11104-28-2			0.057-0.070	38-47	12	33
Aroclor 1232	11141-16-5			0.057-0.070	38-47	1.9	33
Aroclor 1242	53469-1-9			0.057-0.070	38-47	1.7	33
Aroclor 1248	12672-29-6			0.057-0.070	38-47	3.8	33
Aroclor 1254	11097-69-1			0.057-0.070	38-47	1.9	33
Aroclor 1260	11096-82-5			0.057-0.070	38-47	2.1	33

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, May 2012).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, May 2012).
[3] Analytical MDLs and QLs are those documented in validated methods. Per SW-846 Method 8082, the Estimated Quantitation Limit is the MDL times a factor (use 670 for low-concentration soil).
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-5
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Metals and Cyanide
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (mg/Kg)[1]	Project Quantitation Limit Goal (mg/Kg)[2]	SW-846 6010C/7471B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/Kg)	Method QLs (mg/Kg)	MDLs (mg/Kg)	QLs (mg/Kg)
Aluminum	7429-90-5	78,000	20	NA	NA	1.2	10
Antimony	7440-36-0	31	6	NA	NA	0.18	1
Arsenic	7440-38-2	19	1	NA	NA	0.16	1
Barium	7440-39-3	16,000	20	NA	NA	0.38	10
Beryllium	7440-41-7	16	0.5	NA	NA	0.002	0.25
Cadmium	7440-43-9	78	0.5	NA	NA	0.013	0.25
Chromium	7440-47-3	240	2	NA	NA	0.054	1
Cobalt	7440-48-4	1,600	5	NA	NA	0.035	2.5
Copper	7440-50-8	3,100	3	NA	NA	0.42	1.5
Cyanide	57-12-5	1,600	3	NA	NA	NA	2.5
Lead	7439-92-1	400	1	NA	NA	0.14	0.5
Manganese[4]	7439-96-5	11,000	2	NA	NA	0.47	2.5
Mercury	7439-97-6	23	0.1	NA	NA	0.0048	0.033
Nickel	7440-02-0	1,600	4	NA	NA	0.066	2.5
Selenium	7782-49-2	390	4	NA	NA	0.78	1.5
Silver[4]	7440-22-4	390	1	NA	NA	0.079	1.5
Thallium	7440-28-0	5	3	NA	NA	0.24	1
Vanadium	7440-62-2	78	5	NA	NA	0.038	2.5
Zinc	7440-66-6	23,000	6	NA	NA	0.27	2.5

[1] Project action limits are based upon NJDEP RDCSRS (NJAC 7:26D, May 2012).
[2] The project quantitation limits are based the soil PQL listed in NJDEP RDCSRS (NJAC 7:26D, May 2012).
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-6
Reference Limits and Evaluation Table

Matrix: Offsite Backfill and Topsoil
Analytical Group: Radiological Parameters
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (pCi/g)[1]	Project Quantitation Limit Goal (pCi/g)	HASL-300 (or equivalent gamma spectroscopy method)			
				Analytical Method[2]		Achievable Laboratory Limits	
				MDLs (pCi/g)	Method QLs (pCi/g)	MDLs (pCi/g)	QLs (pCi/g)[3]
Ac-228	14331-83-0	NA[4,7]	1	NA	NA	NA	1
Th-232	7440-29-1	2	1	NA	NA	NA	1
Bi-214	14733-03-0	NA[5,7]	1	NA	NA	NA	1
Pb-214	15067-28-4	NA[5,7]	1	NA	NA	NA	1
Ra-226	13982-63-3	2	1	NA	NA	NA	1
Th-234	15065-10-8	NA[6,7]	1	NA	NA	NA	1
U-238	24678-82-8	14	1	NA	NA	NA	1

[1] Project action limits obtained from NJAC 7:28-12 (September 2009).
[2] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and method QLs are not provided in the most recent version of the method for the parameters and matrices of interest.
[3] The achievable laboratory limit is based on the highest expected minimum detectable activity (MDA). MDAs are calculated by the laboratory for each sample analyzed.
[4] The Ac-228 result will be reported by the laboratory and will be used to quantitate the Th-232 activity. There is no action limit listed in NJAC 7:28-12 for Ac-228.
[5] The Bi-214 and Pb-214 results will be reported by the laboratory and will be used to quantitate the Ra-226 activity. There are no action limits listed in NJAC 7:28-12 for Bi-214 and Pb-214.
[6] The Th-234 result will be reported by the laboratory and will be used to quantitate the U-238 activity. There is no action limit listed in NJAC 7:28-12 for Th-234.
[7] Uranium, thorium, and radium decay chain daughter isotopes are assumed to be in secular equilibrium with the parent isotope.

QAPP Worksheet #15-7
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Metals
Concentration Level: Low to Medium

Analyte[1]	CAS Number	Project Action Limit (mg/L)[2]	Project Quantitation Limit Goal (mg/L)[3]	SW-846 6010C/7470A			
				Analytical Method[4]		Achievable Laboratory Limits	
				MDLs (mg/L)	Method QLs (mg/L)	MDLs (mg/L)	QLs (mg/L)
Arsenic	7440-38-2	5.00	0.5	NA	NA	0.0053	0.02
Barium	7440-39-3	100.00	10	NA	NA	0.0085	0.20
Cadmium	7440-43-9	1.00	0.1	NA	NA	0.00014	0.005
Chromium	7440-47-3	5.00	0.5	NA	NA	0.0011	0.02
Lead	7439-92-1	5.00	0.5	NA	NA	0.0022	0.01
Mercury	7439-97-6	0.20	0.02	NA	NA	0.000016	0.0002
Selenium	7782-49-2	1.00	0.1	NA	NA	0.0066	0.03
Silver	7440-22-4	5.00	0.5	NA	NA	0.00059	0.03
Copper	7440-50-8	NS	-	NA	NA	0.0036	0.03
Nickel	7440-02-0	NS	-	NA	NA	0.00085	0.05
Zinc	7440-66-6	NS	-	NA	NA	0.0049	0.05

[1] Copper, nickel, and zinc are only required for solid waste characterization samples.
[2] Project action limits are based upon RCRA. This information will be used for disposal. NS indicates that there is no criterion listed for the analyte.
[3] The project quantiation limits are based upon one-tenth of the RCRA limits.
[4] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-8
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP VOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8260B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Benzene	71-43-2	500	50	NA	NA	0.12	5.0
2-Butanone	78-93-3	200,000	20,000	NA	NA	2.0	5.0
Carbon Tetrachloride	56-23-5	500	50	NA	NA	0.11	5.0
Chlorobenzene	108-90-7	100,000	10,000	NA	NA	0.23	5.0
Chloroform	67-66-3	6,000	600	NA	NA	0.30	5.0
1,2-Dichloroethane	107-06-2	500	50	NA	NA	0.16	5.0
1,1-Dichloroethene	75-35-4	700	70	NA	NA	0.64	5.0
Tetrachloroethene	127-18-4	700	70	NA	NA	0.27	5.0
Trichloroethene	79-01-6	500	50	NA	NA	0.25	5.0
Vinyl Chloride	75-01-4	200	20	NA	NA	0.78	5.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-9
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP SVOCs
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8270D			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Cresols[4]	95-48-7 (2-methylphenol) 106-44-5 (4-methylphenol)	200,000	20,000	NA	NA	1.20 (2-) 1.10 (4-)	33.0 (2-) 33.0 (4-)
1,4-Dichlorobenzene	106-46-7	7,500	750	NA	NA	0.63	33.0
2,4-Dinitrotoluene[5]	121-14-2	130	13	NA	NA	1.10	33.0
Hexachlorobenzene[5]	118-74-1	130	13	NA	NA	0.96	33.0
Hexachlorobutadiene	87-68-3	500	50	NA	NA	0.70	33.0
Hexachloroethane	67-72-1	3,000	300	NA	NA	0.73	33.0
Nitrobenzene	98-95-3	2,000	200	NA	NA	0.90	33.0
Pentachlorophenol	87-86-5	100,000	10,000	NA	NA	0.72	66.0
Pyridine	110-86-1	5,000	500	NA	NA	0.86	33.0
2,4,5-Trichlorophenol	95-95-4	400,000	40,000	NA	NA	0.76	66.0
2,4,6-Trichlorophenol	88-06-2	2,000	200	NA	NA	0.91	33.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.
[4] Total cresols are reported as 2-methylphenol and 4-methylphenol. The sum of these results equals total cresols. The analytical result reported for 4-methylphenol also includes the concentration for the 3-methylphenol isomer; these two isomers cannot be separated. 3-Methylphenol is not reported as a separate compound.
[5] The project quantitation limit goal is less than the achievable laboratory quantitation limit. The achievable laboratory quantitation limit is low enough to meet the project action limit requirements.

QAPP Worksheet #15-10
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Pesticides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8081B			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
Chlordane	57-74-9	30	3	NA	NA	0.47	2.5
Endrin	72-20-8	20	2	NA	NA	0.011	0.10
Heptachlor	76-44-8	8	0.8	NA	NA	0.0031	0.05
Lindane (gamma-BHC)	58-89-9	400	40	NA	NA	0.0063	0.05
Methoxychlor	72-43-5	10,000	1,000	NA	NA	0.057	0.50
Toxaphene	8001-35-2	500	50	NA	NA	1.7	5.0

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-11
Reference Limits and Evaluation Table

Matrix: Solid and Liquid Waste Characterization
Analytical Group: TCLP Herbicides
Concentration Level: Low

Analyte	CAS Number	Project Action Limit (µg/L)[1]	Project Quantitation Limit Goal (µg/L)[2]	SW-846 8151A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (µg/L)	Method QLs (µg/L)	MDLs (µg/L)	QLs (µg/L)
2,4-D	94-75-7	10,000	1,000	NA	NA	0.037	3.3
2,4,5-TP	93-72-1	1,000	100	NA	NA	0.02	0.33

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-12
Reference Limits and Evaluation Table

Matrix: Solid Waste Characterization
Analytical Group: PCBs
Concentration Level: Low to High

Analyte	CAS Number	Project Action Limit (mg/Kg)[1]	Project Quantitation Limit Goal (mg/Kg)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/Kg)	Method QLs (mg/Kg)[3]	MDLs (mg/Kg)	QLs (mg/Kg)
Aroclor 1016	12674-11-2	50	5	0.057-0.070	38-47	0.0047	0.033
Aroclor 1221	11104-28-2			0.057-0.070	38-47	0.0028	0.033
Aroclor 1232	11141-16-5			0.057-0.070	38-47	0.0047	0.033
Aroclor 1242	53469-1-9			0.057-0.070	38-47	0.0045	0.033
Aroclor 1248	12672-29-6			0.057-0.070	38-47	0.0049	0.033
Aroclor 1254	11097-69-1			0.057-0.070	38-47	0.0020	0.033
Aroclor 1260	11096-82-5			0.057-0.070	38-47	0.0062	0.033

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. Per SW-846 Method 8082, the Estimated Quantitation Limit is the MDL times a factor (use 670 for low-concentration soil).

QAPP Worksheet #15-13
Reference Limits and Evaluation Table

Matrix: Liquid Waste Characterization
Analytical Group: PCBs
Concentration Level: Low to High

Analyte	CAS Number	Project Action Limit (mg/L)[1]	Project Quantitation Limit Goal (mg/L)[2]	SW-846 8082A			
				Analytical Method[3]		Achievable Laboratory Limits	
				MDLs (mg/L)	Method QLs (mg/L)[3]	MDLs (mg/L)	QLs (mg/L)
Aroclor 1016	12674-11-2	50	5	NA	NA	0.00012	0.001
Aroclor 1221	11104-28-2			NA	NA	0.00012	0.001
Aroclor 1232	11141-16-5			NA	NA	0.00019	0.001
Aroclor 1242	53469-1-9			NA	NA	0.000095	0.001
Aroclor 1248	12672-29-6			NA	NA	0.00015	0.001
Aroclor 1254	11097-69-1			NA	NA	0.000056	0.001
Aroclor 1260	11096-82-5			NA	NA	0.00016	0.001

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantiation limits are based upon one-tenth of the RCRA limits.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and QLs are not provided in the most recent version of the SW-846 method for the parameters and matrices of interest.

QAPP Worksheet #15-14
Reference Limits and Evaluation Table

Matrix: Solid Waste Characterization
Analytical Group: RCRA Characteristics and Pennsylvania Form U Required Parameters
Concentration Level: NA; Low

Analyte	CAS Number	Project Action Limit[1]	Project Quantitation Limit Goal[2]	Analytical Method[3]		Achievable Laboratory Limits	
				MDLs	Method QLs	MDLs	QLs
pH	NA	2-12.5	0.01 pH units	NA	NA	NA	0.1 pH units
Ignitability	10-36-6	Flashpoint <140°F	NA	NA	NA	NA	Report to nearest 1°F
Reactive Cyanide	57-12-5	100mg/Kg	10mg/Kg	NA	NA	NA	1mg/Kg
Reactive Sulfide	18496-25-8	500mg/Kg	50mg/Kg	NA	NA	NA	1mg/Kg

[1] Project action limits are based upon RCRA. This information will be used for disposal.
[2] The project quantitation limits are based upon one-tenth of the project action limit.
[3] Analytical MDLs and QLs are those documented in validated methods. NA indicates that the MDLs and method QLs are not provided in the most recent version of the method for the parameters and matrices of interest.

QAPP Worksheet #16
Project Schedule/Timeline Table

Activities	Organization	Dates		Deliverable	Deliverable Due Date
		Anticipated Date(s) of Initiation	Anticipated Date of Completion		
Planning and development of data quality objectives	Sevenson	Completed	Completed	Data Quality Objectives	May 2012
Development of the sampling rationale	Sevenson	Completed	Completed	UFP-QAPP	Revision 0: May 2012 Revision 1: July 2012 Revision 2: September 2012
Preparation of the UFP-QAPP	Sevenson	Completed	Completed	UFP-QAPP	Revision 0: May 2012 Revision 1: July 2012 Revision 2: September 2012
Collection of soil samples and submission for analysis – waste characterization, offsite backfill	Sevenson	Summer 2012	Winter 2012/2013	Sample collected per UFP-QAPP	NA
Collection of water samples and submission for analysis – waste characterization	Sevenson	Summer 2012	Winter 2012/2013	Samples collected per UFP-QAPP	NA
Laboratory data analyses review and verification of data	Sevenson	Autumn 2012	Spring 2013	Quality Control Summary Report	Within 45 days after receipt of the last laboratory data report

Note: The project schedule is continually being updated and submitted to the USACE; please refer to the individual submittals of the project schedule for the up-to-date timetable.

QAPP Worksheet #17-1
Sampling Design and Rationale – Offsite Backfill Sampling

As necessary over the duration of the project, backfill material consisting of common fill and standard topsoil will be obtained from offsite sources. Samples of backfill materials will be analyzed to confirm that they are free from chemical contamination as defined in N.J.A.C. 7:26D and NORM as defined in N.J.A.C 7:28-12.

Offsite backfill materials will be acquired from local, USACE-approved, borrow sources. The backfill material will meet the requirements described in Section 02320 of the project specification and the requirements defined in the NJDEP Soil Cleanup Criteria. The fill material will be sampled and analyzed to verify that the soil is clean for the intended use. Documentation certifying that all criteria have been met for offsite backfill will be forwarded to the USACE prior to bringing any material to the site.

A minimum of one sample per every 5,000yd^3 of backfill material, and no less than one sample per borrow area will be collected. Additional samples may be collected and analyzed as requested by the USACE. The sample location is determined when the facility point of contact identifies which pile of backfill material will be used for the site.

Backfill material samples will be analyzed for VOCs, SVOCs, pesticides, PCBs, metals, cyanide, and radiological parameters. The results of these analyses will be compared to the NJDEP RDCSRS and N.J.A.C. 7:28-12, Table 1A (see Worksheets #15-1 through #15-6). Sample results exceeding criteria will be considered unacceptable as topsoil or backfill.

Backfill samples will be analyzed on a five day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this UFP-QAPP. Field duplicates will not be collected. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

VOC samples will be collected using five-gram En-Core™ samplers and the spade and trowel method will be used for all other parameters. With the spade and trowel method, the top layer of soil to desired sample depth is removed with a dedicated, pre-cleaned spade. A dedicated, pre-cleaned trowel is then used to collect samples from the desired depth (i.e., at a minimum from the top six inches of soil). VOC samples will be collected as grab samples and samples for all other parameters will be collected as five-point composites. Soil samples for laboratory analysis will be collected in the appropriate containers identified in Worksheet #19. The order of collection for analytical parameters will be organics and then metals. To maintain integrity of the collected samples, preservation techniques should include refrigeration and protection from light, and the sample jars should be closed immediately after filling and placed on ice.

Samples for VOC analysis will be collected as follows:

- Gloves will be donned immediately prior to sampling and a pair of new gloves will be worn each time a different location is sampled.
- The sample collection process should be completed in a minimal amount of time with the least amount of disruption as possible. Rough trimming of the sampling location surface layer should be considered if the material may have already lost VOCs (e.g., been exposed for more than a few minutes) or if other waste, different soil strata, or vegetation may have contaminated it. Surface layers can be removed by scraping the surface using a clean spade.
- Insert the clean coring tool into a fresh surface for sample collection. Take care not to trap air behind the sample. An undisturbed sample is collected by pushing the barrel of the coring tool into a freshly exposed surface and removing the corer once it is filled.
- The exterior of the barrel should be quickly wiped with a clean disposable towel to ensure a tight seal and the cap snapped on the open end.

Samples for all other analyses will be collected as follows:

- Gloves will be donned immediately prior to sampling and a pair of new gloves will be worn each time a different location is sampled.
- Using a disposable sample trowel, collect sufficient sample into a dedicated, disposable aluminum container from each of the five predetermined sample locations. The container must be large enough to hold more than the required volume and to allow proper mixing without spillage.
- Homogenization will be conducted using a decontaminated stainless steel spoon or spatula. The soil should be scraped from the sides, corners, and bottom, rolled into the middle of the bowl, and mixed. The soil should then be quartered (i.e., divided into four sections) and moved to the sides of the bowl. Each quarter should then be mixed individually, and then rolled to the center of the bowl and mixed with the entire sample again. These steps of quartering the sample, mixing individually, and then mixing the entire sample again should be repeated at least twice. The goal of the homogenization is to achieve a consistent physical appearance over the entire soil sample.
- Transfer the sample into laboratory cleaned sample jars using a clean decontaminated stainless steel spoon or spatula.
- Any leftover sample material will be placed back into the borrow area.

QAPP Worksheet #17-2
Sampling Design and Rationale – Solid Waste Characterization Sampling

As part of the site remediation, soils removed during remediation activities will be disposed of at an offsite disposal facility. Samples will be collected in-situ, prior to excavation activities, for waste characterization and disposal facility approval. The waste characterization samples will be analyzed by the subcontracted laboratory and the results will be sent to the offsite disposal facility for waste shipment approval. Waste characterization sample results will be compared against the disposal facility requirements.

Solid waste characterization samples will be analyzed for TCLP parameters (VOCs, SVOCs, pesticides, herbicides, and metals), total PCBs, and RCRA characteristics (corrosivity, ignitability, reactive cyanide, and reactive sulfide). The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements. In addition to the full characterization samples, if deemed necessary by the Waste Disposal Coordinator or if required by the offsite disposal facility, additional samples may be collected and analyzed for only PCBs. All solid waste characterization samples will be shipped to the laboratory for analysis on a 5 day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this QAPP. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

Solid waste characterization samples will be collected in-situ prior to the initiation of excavation activities. Maps of the excavation areas and predetermined depths of excavation for the three remediation areas are included in Appendix 1. Large plots of the figures included in Appendix 1 are available onsite and should be referenced for all field activities. One full waste characterization sample will be collected from each proposed excavation area, with one sample collected for every 500yd^3 of excavated material in the larger property groupings. With the exception of TCLP VOC samples, the samples will be collected as five-point composites. The compositing procedure is designed to provide a representative sample of the waste material by combining materials collected from five discrete locations in the subsection of the excavation area. In order to prevent excess volatilization, TCLP VOC samples will be collected as a grab sample from one of the sample locations. Samples will be collected from the midpoint depth of the predetermined vertical limit of excavation (see Figures 1A, 2A, and 3A included in Appendix 1). It is anticipated that soil samples will be collected from each location using an auger or other soil coring device following the procedures included in the NJDEP Field Sampling Procedures Manual (NJDEP, 2005). The samples will be collected as follows:

- Gloves will be donned immediately prior to sampling and a clean pair of new disposable gloves will be worn each time a different location is sampled.
- Remove unnecessary twigs, rocks, and other non-soil materials from selected sampling point.
- Begin turning the auger with a clockwise motion and continue until the desired sampling depth is obtained.
- Use a second auger to collect the sample. Discard one-half inch of material in the top portion of the auger due to cave-in.
- Place the sample for VOC analysis directly into the required container, taking care to fill the container completely to limit headspace.
- Place the sample into a clean decontaminated stainless steel bowl to be homogenized. The bowl must be large enough to hold more that the required sample volume and to allow proper mixing without spillage.
- Collect the samples from the other four location using the auger as described above, placing each aliquot in the same stainless steel bowl.
- Homogenization will be conducted using a decontaminated stainless steel spoon or spatula. The soil should be scraped from the sides, corners, and bottom, rolled into the middle of the bowl, and mixed. The soil should then be quartered (i.e., divided into four sections) and moved to the sides of the bowl. Each quarter should then be mixed individually, and then rolled to the center of the

bowl and mixed with the entire sample again. These steps of quartering the sample, mixing individually, and then mixing the entire sample again should be repeated at least twice. The goal of the homogenization is to achieve a consistent physical appearance over the entire soil sample.

- Transfer the sample into laboratory cleaned sample jars using a clean decontaminated stainless steel spoon or spatula.
- Any leftover sample material will be placed back into the excavation area.

QAPP Worksheet #17-3
Sampling Design and Rationale – Liquid Waste Characterization Sampling

Liquid wastes generated during site activities, if any, will be containerized in an aboveground storage tank. At a minimum, one sample will be collected from each storage tank to determine the waste management approach. The sample results and the completed waste profile will be sent to the offsite disposal facility for waste shipment approval.

Liquid waste characterization samples will be analyzed for TCLP parameters (VOCs, SVOCs, pesticides, herbicides, and metals), total PCBs, and RCRA characteristics (corrosivity, ignitability, reactive cyanide, and reactive sulfide). Additional analytes may be required by the offsite disposal facility; the Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements. The samples will be shipped to the laboratory for analysis on a 5 day turn around time; validated data will be received on a 30 calendar day turn around time. Field QC sample collection is summarized in Worksheet #20, and each field QC sample type is defined in Worksheet #28 of this QAPP. Disposable equipment will be used when possible to avoid the need for equipment blanks.

Samples will be collected according to the following procedures:

Samples will be collected using dedicated, disposal polyvinyl chloride or Teflon bailers. The following sample procedure is consistent with NJDEP sampling instructions (NJDEP, 2005):

- Prepare the work area by placing plastic sheeting on the ground to avoid cross-contamination.
- Attach the bailer to cable or line for lowering. Polyethylene or nylon rope is recommended.
- Lower the bailer slowly until it contacts the water surface.
- Allow the bailer to sink and fill.
- Slowly raise the bailer to the surface. Do not allow the bailer line or bailer to contact the ground surface.
- Fill sample bottles by tipping bailer to allow slow discharge from the top to flow gently down the side of the sample bottle with minimal turbulence. If a bottom drain is present on the bailer, achieve a slow steady flow.
- Repeat as necessary to acquire sufficient volume to fill all sample containers.

QAPP Worksheet #18
Sampling Locations and Methods/SOP Requirements Table

Sampling Location/AOC	Matrix	Depth	Analytical Group	Concentration Level	Number of Samples (identify field duplicates)	Sampling SOP Reference	Rationale for Sampling Location
Offsite backfill and topsoil	Soil	At least 6 inches below surface	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	Approximately 2 samples (i.e., 1 backfill sample and 1 topsoil sample) No field duplicate samples required	Worksheet #17-1	Verify topsoil and backfill from offsite sources do not contain contaminant levels that are hazardous to human health or the environment
Waste characterization[1]	Soil	Midpoint[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides PCBs TCLP Metals Cyanide Reactivity Sulfide Reactivity pH Ignitability	Low to High	Approximately 7 samples (i.e., 2 samples from Property 108/129/301/303; 1 sample from Property 116/302; 4 samples from Property 128/304/305) No field duplicate samples required	Worksheet #17-2	Characterize waste for proper disposal
Waste characterization	Soil	Midpoint[2]	PCBs	Low to High	Determined in the field and/or as requested by the offsite disposal facility No field duplicate samples required	Worksheet #17-2	Characterize waste for proper disposal
Waste characterization[1]	Aqueous	NA	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides PCBs TCLP Metals Cyanide Reactivity Sulfide Reactivity pH Ignitability	Low to High	Determined in the field based on the amount of wastewater generated No field duplicate samples required	Worksheet #17-3	Characterize waste for proper disposal

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

[2] Samples will be collected at the midpoint between the ground surface and the limit of excavation. Refer to the excavation plan drawings for each property group included in the Appendix 1.

QAPP Worksheet #19
Analytical SOP Requirements Table

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Offsite backfill	VOCs SVOCs Pesticide PCBs Metals Cyanide Radiological Parameters	Trace to Low	90.0012 70.0011 60.0006 60.0003 100.0012, 100.0111 100.0004 PGH-R-023-5	200 grams for extractable organics and metals; 2 different 5 gram aliquots for VOCs Gamma spectroscopy: fill Marinelli container (sample weight will vary based on density of material)	32oz. glass container for extractable organics and metals; 5 gram EnCore™ samplers and 4oz. glass container for VOCs; 32oz. glass containers for gamma spectroscopy	4°C±2°C; minimize headspace; none required for gamma spectroscopy	**VOCs:** Analyze within 14 days from date of collection **SVOCs, Pesticides, PCBs:** 14 days from date of collection to extraction and 40 days from extraction to analysis **Metals:** 180 days from date of collection to analysis; 28 days from date of collection to analysis for mercury **Cyanide:** 14 days from date of collection to analysis **Gamma Spectroscopy:** 180 days from date of collection to analysis

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Solid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	90.0012 70.0011 60.0006 60.0034 100.0012, 100.0111 60.0003 100.0112 100.0024 100.0015 100.0015	200 grams for extractable organics and metals; 25 grams for VOCs; 100 grams for RCRA characteristics	32 oz. glass container for extractable organics and metals; 4oz. glass container for VOCs; 32oz. glass container for RCRA characteristics	4°C±2°C; **VOCs:** zero headspace	**TCLP extraction** within 14 days for organics and within 180 days for metals (except mercury within 28 days); **Analysis of TCLP extracts:** *VOCs:* analysis within 14 days; *Extractable Organics (SVOCs, pesticides, herbicides):* extraction of leachate within 7 days and analysis within 40 days of extraction; *Metals:* analysis within 180 days (except mercury within 28 days); *Oil & Grease, Ammonia, Chemical Oxygen Demand:* analysis within 28 days **PCBs:** 14 days from date of collection to extraction and 40 days from extraction to analysis **pH, Ignitability, Reactive Sulfide:** 7 days from date of collection to analysis **Reactive Cyanide:** 14 days from date of collection to analysis
Solid Waste Characterization	PCBs	Low to High	60.0003	200 grams for extractable organics and	4oz. glass container	4°C±2°C	14 days from date of collection to extraction and 40 days from extraction to analysis

Matrix	Analytical Group	Concentration Level	Analytical and Preparation Method/SOP Reference	Sample Volume	Containers (number, size, and type)[1]	Preservation Requirements (chemical, temperature, light protected)	Maximum Holding Time (preparation/analysis)
Liquid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	90.0012 70.0011 60.0006 60.0034 100.0012, 100.0111 60.0003 100.0112 100.0024 100.0015 100.0015	40mL for TCLP VOCs; 1L each for TCLP SVOCs, TCLP pesticides, TCLP herbicides, and PCBs; 500mL for TCLP metals; 100mL for pH; 250mL for ignitability; 1L for reactive cyanide; 500mL for reactive sulfide	2-40mL glass vial with Septa lined cap; 1L amber glass bottle each for TCLP SVOCs, TCLP pesticides, TCLP herbicides, and PCBs; 500mL plastic bottle for TCLP metals; 100mL plastic bottle for pH; 250mL glass bottle with Septa lined cap for ignitability; 1L plastic bottle for reactive cyanide; 500mL plastic bottle for reactive sulfide	4°C±2°C; **TCLP VOCs:** zero headspace/HCl to pH<2; **TCLP metals:** HNO_3 to pH<2; **reactive cyanide:** ascorbic NaOH to pH>12; **reactive sulfide:** zinc acetate NaOH to pH>9	**TCLP extraction** within 7 days for organics and within 180 days for metals (except mercury within 28 days); **Analysis of TCLP extracts:** *VOCs:* analysis within 14 days; *Extractable Organics (SVOCs, pesticides, herbicides):* extraction of leachate within 7 days and analysis within 40 days of extraction; *Metals:* analysis within 180 days (except mercury within 28 days) **PCBs:** 7 days from date of collection to extraction and 40 days from extraction to analysis **pH:** Immediately **Ignitability, Reactive Sulfide:** 7 days from date of collection to analysis **Reactive Cyanide:** 14 days from date of collection to analysis

[1] In some cases, multiple analyses can be taken from the same jar. Consult the laboratory for further instructions.
[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #20
Field Quality Control Sample Summary Table

Matrix	Analytical Group	Conc. Level	Analytical and Preparation SOP Reference	No. of Sampling Locations	No. of Field Duplicate Pairs	No. of MS/MSD	No. of Field Blanks	No. of Equip. Blanks	No. of Trip Blank Samples	Total No. of Samples to Lab
Offsite backfill and topsoil	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	90.0012 70.0011 60.0006 60.0003 100.0012, 100.0111 100.0004 PGH-R-023-5	One sample per 5,000yd³ of backfill material and not less than one sample per borrow area for a total of approximately 2 samples.	0	0	0	0	0	2
Solid waste characterization[1]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	90.0012 70.0011 60.0006 60.0034 100.0012, 100.0111 60.0003 100.0112 100.0024 100.0015 100.0015	Approximately 7 samples (i.e., 2 samples from Property 108/129/301/303; 1 sample from Property 116/302; 4 samples from Property 128/304/305)	0	0	0	0	0	7
Solid waste characterization	PCBs	Low to High	60.0003	Determined in the field and/or as requested by the offsite disposal facility	0	0	0	0	0	TBD
Liquid waste characterization[1]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	90.0012 70.0011 60.0006 60.0034 100.0012, 100.0111 60.0003 100.0112 100.0024 100.0015 100.0015	Determined in the field based on the amount of wastewater generated	0	0	0	0	0	TBD

[1] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #21
Project Sampling SOP References Table

Reference Number	Title, Revision Date, and/or Number	Originating Organization	Equipment Type	Modified for Project Work? (Y/N)	Comments
NA	NJDEP Field Sampling Procedures Manual, August 2005	NJDEP	Sample collection and processing equipment	No	To be used by the field team as a guide to collecting samples. Sampling methodology included in Worksheet #17 is based on the procedures included in this manual. Specific sections to reference include 5.2.1.1 (liquid waste characterization), 6.2.7 (VOCs in soil), 6.2.8 (soil homogenization), and 6.6 (waste piles).

QAPP Worksheet #22
Field Equipment Calibration, Maintenance, Testing, and Inspection Table

Field Equipment	Calibration Activity	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Responsible Person	SOP Reference
No field sampling equipment is expected to be used during remediation activities.									

QAPP Worksheet #23
Analytical SOP References Table[1]

Reference Number	Title, Revision Date, and/or Number[2]	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work?
60.0003	Determination of Polychlorinated Biphenyls by Gas Chromatography/Electron Capture Detector Analysis Using SW846 Method 8082A, Revision 10, April 11, 2011	Definitive	PCBs	Gas Chromatography with Electron Capture Detector (GC-ECD)	Spectrum	No
60.0006	Determination of Pesticides by Gas Chromatography/Electron Capture Detector Analysis by SW846 Method 8081A, Revision 10, April 8, 2011	Definitive	Pesticides	GC-ECD	Spectrum	No
60.0034	Determination of Chlorinated Herbicides by Gas Chromatography/Electron Capture Detector Analysis by SW846 Method 8151A, Revision 8, April 8, 2011	Definitive	Herbicides	GC-ECD	Spectrum	No
70.0011	Determination of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry Analysis by SW846 Method 8270D, Revision 11, July 18, 2011	Definitive	SVOCs	GC/MS	Spectrum	No
90.0012	Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry Analysis by SW846 Method 8260C, Revision 12, September 9, 2011	Definitive	VOCs	Gas Chromatography/Mass Spectroscopy (GC/MS)	Spectrum	No
100.0004	Total Cyanide by Automated Colorimetric with Midi-Distillation SW846 9012B, Revision 8, March 12, 2012	Definitive	Cyanide	Distillation, Colorimetric	Spectrum	No
100.0111	Determination of Metals in Water and Soil by Inductively Coupled Argon Plasma Atomic Emission Spectrometry using Method Sw846 6010C, Revision 13, December 22, 2010	Definitive	Metals	Inductively Coupled Plasma (ICP)-Atomic Emission Spectrometry (AES)	Spectrum	No
100.0012	Mercury Analysis in Aqueous and Soil Samples by Flow Injection Mercury Systems (FIMS) for Cold Vapor Atomic Analysis by SW846 Method 7470A/7471B, Revision 10, June 15, 2010	Definitive	Mercury	Cold Vapor Atomic Absorption (CVAA)	Spectrum	No

Reference Number	Title, Revision Date, and/or Number[2]	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work?
100.0015	The Preparation of Waste Samples fro Reactive Cyanide and Sulfide; Determination of Reactive Cyanide by Automated Colorimetric Method and Reactive Sulfide by Spectrophotometric Method SW846 Methods 7.3.3.2 and 7.3.4.2, Revision 6, November 9, 2011	Definitive	Reactive Cyanide and Sulfide	Cyanide: Colorimetric Sulfide: Spectrophotometric	Spectrum	No
100.0024	Flashpoint Analysis, Revision 9, August 7, 2012	Definitive	Ignitability	Pensky-Martens	Spectrum	No
100.0112	pH in Soil Samples by SW846 9045C and USEPA SOM01.2, Revision 8, July 28, 2011	Definitive	pH	pH Meter	Spectrum	No
PGH-R-023-5	Gamma Spectroscopy Instrument Operations, May 18, 2012	Definitive	Radiological Parameters	Gamma Spectrometer	Spectrum	No

[1] Copies of the laboratory SOPs are included in Appendix 6.
[2] The SOPs included in this Worksheet are current as of the writing of this document. The laboratory will use the most current version of their SOP for all analyses.

QAPP Worksheet #24
Analytical Instrument Calibration Table

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/MS (VOC)	Bromofluorobenzene (BFB) tuning	Prior to initial calibration and calibration verification	Refer to criteria listed in the SOP	Retune instrument and verify	Laboratory analyst	90.0012
	Initial calibration (minimum five points)	Prior to sample analysis or when calibration verification fails	% relative standard deviation (RSD) must be ≤15% for each compound. If %RSD >15%, determine best-fit curve: Linear regression correlation coefficient ≥0.995 or quadratic regression coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	
	System performance check	Once after each initial calibration and calibration verification	Response factor ≥0.10 for chloromethane, 1,1-dichloroethane, and bromoform; ≥0.30 for chlorobenzene and 1,1,2,2-tetrachloroethane	Correct the problem and repeat initial calibration.	Laboratory analyst	
	Continuing Calibration Verification (CCV)	At the start of each analytical sequence and every 12 hours thereafter	Response factor ≥0.10 for chloromethane, 1,1-dichloroethane, and bromoform; ≥0.30 for chlorobenzene and 1,1,2,2-tetrachloroethane. All other analytes within ±20% of expected value.	Correct the problem, then recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/MS (SVOC)	Decafluorotriphenylphosphine (DFTPP) tuning	Prior to initial calibration and calibration verification (every 12 hours)	Refer to criteria listed in the SOP	Retune instrument and verify	Laboratory analyst	70.0011
	Initial calibration (minimum five points)	Prior to sample analysis or when calibration verification fails	%RSD must be ≤15% for each compound. If %RSD >15%, determine best-fit curve: Linear regression correlation coefficient ≥0.995 or quadratic regression coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	
	System performance check	Once after each initial calibration and calibration verification	Response factor ≥0.05 for N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol	Correct the problem and repeat initial calibration.	Laboratory analyst	
	CCV	At the start of each analytical sequence and every 12 hours thereafter	Response factor ≥0.05 for N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol. All other analytes within ±20% of expected value.	Correct the problem, then recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
GC/ECD (pesticides, PCBs, herbicides)	Multipoint initial calibration for single response pesticides; multipoint calibration for multi-peak pesticides; multipoint calibration for aroclors 1016 and 1260 only	Whenever major instrument maintenance or modification is performed, or when calibration verification fails	To use average relative response factor (RRF) for quantitation of any analyte, %RSD must be ≤15%; otherwise use first order linear regression curve with correlation coefficient ≥0.995 or quadratic regression with coefficient of determination ≥0.99	Correct the problem and repeat the initial calibration.	Laboratory analyst	60.0003 60.0006 60.0034
	Initial calibration verification (ICV)	Once for each multipoint initial calibration	All analytes within ±20% of expected value	Correct the problem, then repeat the initial calibration and reanalyze all samples	Laboratory analyst	
	CCV	At the start of each analytical sequence, after 12 hours or 10 samples whichever is more frequent, and at the end of the sequence	All analytes within ±20% of expected value; either column may be used to meet the calibration criteria, however, the analytes must be quantified from then column that met the criteria	Correct the problem, then repeat initial calibration and reanalyze all samples.	Laboratory analyst	
ICP-AES (metals)	Initial calibration	Before sample analysis, every 24 hours, whenever modifications are made to the system, or when continuing calibration verification fails	Correlation coefficient must be ≥0.997	Correct problem and repeat initial calibration.	Laboratory analyst	100.0111

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	ICV	Once after each initial calibration, prior to sample analysis	Recovery must be 95-105%	Reanalyze, if problem persists, terminate analysis, correct problem, recalibrate, and re-verify the calibration	Laboratory analyst	
	QC check standard	Once after each initial calibration, prior to sample analysis	Recovery must be 90-110%	Terminate analysis, correct problem, recalibrate, and re-verify the calibration	Laboratory analyst	
	Initial calibration blank (ICB)	Immediately after analysis of ICV	Absolute value of blank result <3-sigma the mean calibration blank.	Terminate analysis, correct the problem, recalibrate, and re-verify the calibration	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	CCV	After every 10 samples and at the end of the analysis sequence	Recovery must be 90-110%	Terminate analysis, correct the problem, recalibrate and re-verify the calibration; reanalyze all samples and QC checks run since last acceptable CCV	Laboratory analyst	
	Continuing calibration blank (CCB)	Immediately after analysis of the CCV	Absolute value of blank must be <RL	Terminate analysis, correct problem, recalibrate and re-verify the calibration; reanalyze all samples and QC checks run since the last acceptable CCB	Laboratory analyst	

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
CVAA (mercury)	Initial calibration	Before sample analysis, every 24 hours, whenever modifications are made to the system, or when continuing calibration verification fails	Correlation coefficient must be ≥0.995	Correct problem and repeat initial calibration	Laboratory analyst	100.0012
	QC check standard	Immediately following each initial calibration	All analytes within ±10% of expected value	Check QC solution; recalibrate and reanalyze; if results are still not acceptable, re-digest and reanalyze samples	Laboratory analyst	
	CCV	After every 10 samples and at the end of the analysis sequence	All analytes within ±20% of expected value	Recalibrate and reanalyze all samples since the last acceptable continuing calibration verification	Laboratory analyst	
Cyanide	Initial multipoint calibration (minimum eight standards and a calibration blank)	Annually or if analysis of continuing calibration or QC check standards do not meet criteria	Correlation coefficient ≥0.995 for linear regression	Correct problem then repeat initial calibration.	Laboratory analyst	100.0004 100.0015

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Distilled standards (one high and one low)	Once per initial calibration	Value within ±10% of true value	Correct problem then repeat distilled standard	Laboratory analyst	
	CCV	Daily prior to sample analysis	Value within ±15% of true value	Prepare new calibration verification standard; recalibrate if problem cannot be located	Laboratory analyst	
Gamma Spectroscopy	Energy and efficiency calibration	After initial installation, annually, and following system maintenance that could affect the calibration	Energy calibration: full width at half maximum (FWHM) ±5% Efficiency calibration: (1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat calibration	Laboratory analyst	PGH-R-023-5

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Energy and efficiency check	Daily	Energy check: FWHM ±5% Efficiency check: (1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat calibration	Laboratory analyst	
	Background check	Daily	(1) If within 2 sigma of historic mean, no action necessary (2) If between 2 and 3 sigma of mean, no action necessary but record and observe (3) If greater than 3 sigma of historic mean, repeat; if successful instrument is usable; if unsuccessful tag instrument out of service	Repeat background check	Laboratory analyst	
Pensky-Martens	Determine flashpoint of xylenes	Once per 10 samples analyzed	Value of 81°F (±2°F)	Check apparatus for proper operation before analyzing samples	Laboratory analyst	100.0024
pH Meter	Initial calibration (minimum 2 points)	Daily	Slope of curve must be 100±5%	Correct problem and repeat calibration	Laboratory analyst	100.0112

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference
	Calibration verification	After initial calibration, after every 10 samples analyzed, and at the end of sample measurement	pH 7 buffer solution must exhibit pH of 7.00±0.05	Repeat initial calibration and reanalyze all associated samples	Laboratory analyst	

QAPP Worksheet #25
Analytical Instrument and Equipment Maintenance, Testing, and Inspection Table

All laboratory analytical equipment will undergo maintenance and testing procedures in accordance with the laboratory SOPs. Laboratory SOPs must be compliant with minimum method requirements. Some typical maintenance and testing activities are included in the following table.

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
GC/MS; GC-ECD	Daily	Purge traps are baked out; changes of the traps are logged.	Laboratory analyst	60.0003 60.0006 60.0034 70.0011 90.0012
		Columns are baked out.		
		Volume of gas cylinders is checked.		
	As Required	Teflon ferrules are replaced.		
		Injection port liners are cleaned or replaced.		
		GC septa are changed after 50 injections.		
		Detectors are baked out.		
	Quarterly	Instrument electronics are visually inspected and cleaned.		
		Detectors are cleaned as recommended by the manufacturer or more frequently as needed.		
	Annually	Electron capture detectors are wipe tested.		
		Preventative maintenance performed by manufacturer as per service contract terms.	Manufacturer representative	
ICP-AES	Daily	Verify room temperature and humidity maintained to manufacturer's specifications.	Laboratory analyst	100.0111
		Check argon tank pressure and verify that spare tank is available.		
		Inspect pump tubing before operation and every few hours.		
		Check that nebulizer is not clogged and that capillary tubing is clean and in good condition.		
		Inspect torch glassware and aerosol injector tube.		
		Be sure drain tube is firmly attached to spray chamber and drain bottle. Verify that drain bottle is not full and that there is liquid in the loop.		
	As Required	Check tension on peristaltic pump tubing.		

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
		Check nebulizer spray pattern with deionized water and clean spray tips if necessary.		
		Clean torch components with water or solvents. Replace cracked or work o-rings.		
		Inspect air filter and clean with soap and water if necessary.		
		Check performance by running Manganese Background Equivalent Concentration or Coefficient of Variation tests.		
CVAA	Daily	Clean and rinse all glassware with 20% nitric acid and 10% hydrochloric acid.	Laboratory analyst	100.0012
		Check tubing for contamination and wear.		
		Regenerate drying tube.		
	As Required	Rinse stannous chloride and pump tubing with 10% 10N sodium hydroxide and deionized water.		
		Wipe pump rollers with isopropyl alcohol.		
		Replace lamp and clean optical cell.		
Cyanide Analysis Distillation System	Daily	Clean glassware prior to reuse	Laboratory analyst	100.0004 100.0015
		Rinse tubing connecting distillation heads and dispersion tube assemblies with reagent water		
	As Required	Replace tubing when it appears soiled		
	Semi-Annually	Replace tubing		
		Inspect spectrophotometer	Manufacturer representative	
	As Required	Change internal filling solution		
Gamma Spectroscopy System	Daily	Background, calibration, and LCS checks	Laboratory Supervisor	PGH-R-023-5
	Monthly	System background check		
	Annually	Efficiency and energy calibrations		
	Semi-Annually	Physical inspection		
		Test point voltage check	Manufacturer representative	
		Certified weight set response check		
		Re-generate column efficiency		
Pensky-Martens	Daily	Verify room temperature and humidity maintained to manufacturer's specifications.	Laboratory analyst	100.0024
		Wash flash cup with soap and water after each analysis.		

Instrument/Equipment	Frequency	Maintenance, Testing, or Inspection Activity	Responsible Person	SOP Reference
pH Meter	Daily	Clean glassware prior to reuse	Laboratory analyst	100.0112
		Store electrode in pH 7 buffer solution or storage solution		
	As Required	Change internal filling solution		
		Re-generate column efficiency		

QAPP Worksheet #26
Sample Handling System

SAMPLE COLLECTION, PACKAGING, AND SHIPMENT
Sample Collection (Personnel/Organization): Sevenson field team
Sample Packaging (Personnel/Organization): Sevenson field team
Coordination of Shipment (Personnel/Organization): Sevenson field team
Type of Shipment/Carrier: Federal Express or United Parcel Service (UPS) for Overnight Delivery or courier to the laboratory
SAMPLE RECEIPT AND ANALYSIS
Sample Receipt (Personnel/Organization): Subcontract laboratory personnel
Sample Custody and Storage (Personnel/Organization): Subcontract laboratory personnel
Sample Preparation (Personnel/Organization): Subcontract laboratory personnel
Sample Determinative Analysis (Personnel/Organization): Subcontract laboratory personnel
SAMPLE ARCHIVING
Field Sample Storage (No. of days from sample collection): Samples will not be stored in the field, but will be shipped within 24 hours of collection. If in an emergency they are stored in the field, they will be kept in a cooler or transferred to a refrigerator kept at 4°C. Laboratory sample custodian will store samples at the laboratory for 30 days after the final report has been submitted to Sevenson.
Sample Extract/Digestate Storage (No. of days from extraction/digestion): Sample extraction and digestion must be conducted according to the requirements given in Worksheet #19. Laboratory analytical technicians will store all extracts/digestates for 30 days after the final report has been submitted to Sevenson.
Biological Sample Storage (No. of days from sample collection): Not applicable
SAMPLE DISPOSAL
Personnel/Organization: Subcontract laboratory personnel
Number of Days from Analysis: Samples may not be disposed of prior to 30 days after final report has been submitted to Sevenson.

QAPP Worksheet #27
Sample Custody Requirements

Proper sample handling, shipment, and maintenance of a chain of custody (COC) are key components of building the documentation and support for data that can be used to make project decisions. It is important that sample handling and sample COC requirements are performed completely, accurately, and consistently. A COC record establishes the documentation necessary to trace sample possession from time of collection through sample analysis and disposition.

A sample is considered to be in someone's custody if it:

- Is in his/her possession.
- Is in his/her view, after being in his/her possession.
- Is in his/her possession and has been placed in a secure area.
- Is in a designated secure area.

Field Logbooks/Documentation

The sequentially numbered field logbook (i.e., OU1 Soil Remediation #1, -#2, etc.) will provide the means of recording data collection activities performed. As such, logbook entries will be described in as much detail as possible so that particular site activities could be reconstructed without reliance on memory.

Field logbooks will be bound logbooks, field survey books, or notebooks. Logbooks will be assigned to field personnel, but will be stored in the document control center when not in use.

A project-specific document number will be used to identify each logbook. The title page of each logbook will contain the following information:

- Person to whom the logbook is assigned.
- Logbook number.
- Project name.
- Project start date.
- Project end date.

Entries into the logbook will contain a variety of information. The beginning of each entry will include: the date, start time, weather conditions, names of all sampling team members present, level of personal protection being used, and the signature of the person making the entry. The names of visitors to the site (including additional field sampling or investigative team personnel), and the purpose of their visit will also be recorded in the field logbook.

Measurements made and samples collected will be recorded in the field logbook. All entries will be made in ink and no erasures will be made. If an incorrect entry is made, the incorrect information will be crossed out with a single strike mark and initialed. Whenever a sample is collected or a measurement is made, a detailed description of the location of the station will be recorded in the logbook. The number of photographs taken at the station, if any, will also be noted. The logbook will identify all equipment used to make measurements.

Samples will be collected in accordance with the sampling procedures documented in Worksheet #17. The equipment used to collect samples will be noted, along with the time of sampling, sample description, depth of sample collection, volume, and the number of sample containers. The corresponding sample identification number will be prominently listed.

Field Procedures

The field sampler will be personally responsible for the care and custody of the samples until the samples are transferred or properly dispatched. As few people as possible will handle the samples. The CQCSM will review all field activities to determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

Sample Numbering System

A unique sample numbering scheme will be used to identify each sample designated for laboratory analysis. Sample identification numbers will be used on all sample labels, field data sheets or logbooks, chain of custody records, and all other applicable documentation used during the project. The sample identification scheme to be used for the project is as follows:

Offsite backfill and topsoil samples will be labeled: CD-BF-xx or CD-TS-xx

- CD-BF/CD-TS — Project site and sample type (Cornell-Dubilier backfill sample or Cornell-Dubilier topsoil sample)
- xx — Sequential sample number

Solid waste characterization samples will be labeled: CD-WC-xx

- CD-WC — Project site and sample type (Cornell-Dubilier waste characterization sample)
- xx — Sequential sample number

Wastewater characterization samples will be labeled: CD-WW-xx

- CD-WW — Project site sand sample type (Cornell-Dubilier wastewater sample)
- xx — Sequential sample number

Sample Labeling

Self-adhesive labels will be affixed to each sample container. The sample label will be completed in indelible ink and will include the following information:

- Project name
- Sample ID number
- Date and time of sample collection
- Sampler's initials
- Sample type (i.e., matrix)
- Preservative used, if any
- Analyses requested

Sample labels will be affixed to the sample containers and covered with clear packaging tape.

Chain of Custody Procedures

The COC form serves as an official communication to the laboratory detailing the particular analyses required for each sample. The COC record will accompany the samples from the time of sampling through all transfers of custody. The sample collector will complete a COC record to accompany each delivery container and will be responsible for shipping samples to the laboratory.

An example COC form is included in Appendix 5. The COC form and sample shipment documentation will be faxed or e-mailed to the laboratory when samples are shipped. The following information is typically recorded on manual COC forms:

- Project name and/or project number

- Signature of field sampler
- Field sample identification number
- Date and time of sample collection
- Grab or composite sample designation
- Sample matrix
- Analyses required
- Preservation technique
- Signatures and dates for transfer of custody
- Air express/shipper's bill of lading identification number

Lines not used on the COC record will be crossed out. A second member of the field sampling team will review the completed COC record to assure that required information is not omitted and that unused lines are crossed out. The original signature copy of the COC record will be enclosed in a plastic bag and secured to the inside of the cooler lid. A copy of the COC record will be retained for project files.

Packaging and Shipping Procedures

As an aid to field personnel and as part of the site QC inspections, Sevenson Checklist Number 007, "Task Specific QC Checklist – Packing, Storing, and Shipment of Samples" and Sevenson Checklist Number 010, "Task Specific Checklist – Sample Cooler Shipment" are included in Appendix 5. All samples will be packaged and labeled for shipment in compliance with current regulations. All samples should be shipped to the project laboratory within 24 hours of sample collection via overnight courier service to ensure timely receipt of the samples by the laboratory. The shipment of samples on Friday is discouraged unless it is absolutely necessary and the laboratory has assured that personnel will be present to receive the shipment on Saturday and implement any necessary processing within the analytical holding times.

Samples should be prepared for shipment as follows:

- Samples will immediately be placed in a cooler filled with ice for temporary storage prior to shipment to the laboratory. Sample labels are placed on samples immediately after sample collection.
- Secure the lid of the sample jar tightly. Wrap the sample jar with bubble wrap. Place each sample jar in a separate ziplock-style plastic bag and seal.
- Only metal or plastic ice chests will be used for shipping samples. Tape shut any drain plugs on both the inside and outside of the cooler. Place a new, clean garbage bag inside the cooler as a secondary liner.
- Place bubble wrap or other suitable, waterproof packaging material between each sample bag to take up any void space in the cooler and to prevent the containers from touching. Place a temperature blank (i.e., a small bottle or jar filled with water) in close proximity to the sample containers.
- Ice used in coolers for shipping to the laboratories will be placed in doubled ziplock-style bags with a minimum amount of air. Use an adequate amount of ice bags such that the samples arrive at the laboratory at 4°C. Secure the secondary cooler liner with a twist-tie or knot.
- The COC record will be placed inside a ziplock-style bag and taped to the inside of the cooler top.
- The cooler will be closed and taped shut with packing tape or duct tape, and a custody seal will be properly placed across two sides of the cooler lid, preferably one on the front and one on the side.
- The shipping air bill will be securely attached to the exterior of the cooler. Commercial carriers or sample pickup couriers are not required to sign the COC record if it is sealed inside the shipping cooler and the custody seals remain intact. A copy of the bill of lading must be retained in the project files.

Laboratory Chain of Custody Procedures

The laboratory sample custodian will reconcile the information on the COC records with the sample bottles received and sign and date all appropriate receiving documents. The sample custodian will document any anomalies and report these to the laboratory project manager. Anomalies will be resolved with the field sampler or CQCSM. The information will be entered in the Laboratory Information Management System (LIMS) along with the analyses being requested. To ensure traceability of samples while in possession of the laboratory, a method for sample identification that has been documented by the laboratory will be used to assign internal sample numbers. The sample custodian is responsible for seeing that all samples are transferred to the proper analyst or stored in the appropriate secure area. Laboratory personnel are responsible for the care and custody of samples from the time they are received, until the sample is exhausted or returned to the custodian using an internal COC record to track sample movement within the laboratory. When sample analyses and necessary QA checks have been completed in the laboratory, the unused portion of the sample will be disposed of properly. All identifying stickers, data sheets, and laboratory records are retained as part of the documentation. Sample containers and remaining samples are disposed of in compliance with federal, state, and local regulatory requirements.

Final Evidence Field Custody Procedures

The evidence files for the project are maintained at the Sevenson office. The content of the evidence file will include all relevant records, reports, correspondence, logs, field logbooks, laboratory sample preparation and analysis logbooks, data packages, pictures, subcontractor reports, chain of custody records, data review reports, etc. The evidence file will be under custody of the contractor project manager in a locked, secure area. The selected contract laboratory will also retain evidence files of analytical data for a minimum of seven years.

QAPP Worksheet #28-1
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	Metals and Cyanide
Concentration Level	Low
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	100.0004, 100.0012, 100.0111
Sampler's Name	To Be Determined (TBD)
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Calibration blank	Before beginning a sample run, after every 10 samples, and at the end of the analytical sequence	Per QAPP and laboratory SOP	Correct problem. Re-prep and reanalyze calibration blank. All samples following the last acceptable calibration blank must be reanalyzed.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >LOD
Method Blank	One per preparatory	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
ICS (required for method SW846 6010C only)	The beginning of an analytical run	Per QAPP and laboratory SOP	Terminate analysis; locate and correct problem; reanalyze ICS and all samples	Laboratory analyst	Precision, Accuracy	*ICS-A:* Absolute value of concentration for all non-spiked analytes <LOD. *ICS-AB:* Within ±20% of true value

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. If the MS falls outside of criteria, additional quality control tests are required to evaluate matrix effects.	Laboratory analyst	Accuracy	Recovery: 80-120%
Laboratory Duplicate	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision	RPD ≤20% between sample and sample duplicate
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Recovery: 80-120%
Serial Dilution	One per preparatory batch	Per QAPP and laboratory SOP	*SW846 6010C:* Perform PDS addition *SW846 7471B:* Perform recovery test	Laboratory analyst	Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample
PDS (required for method SW846 6010C only)	When dilution test fails or analyte concentration in all samples <50x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by method of standard additions (MSA) or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 75-125%
Recovery Test (required for method SW846 7471B only)	When dilution test fails or analyte concentration in all samples <25x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 85-115%

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-2
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	VOCs, SVOCs, Pesticides, PCBs
Concentration Level	Trace (VOCs), Low (SVOCs, Pesticides, PCBs)
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	60.0003, 60.0006, 70.0011, 90.0012
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
Surrogate Spike	All field and QC samples	Per QAPP and laboratory SOP	Correct problem then reprep and reanalyze all failed samples for the failed surrogates in the associated preparatory batch, if sufficient sample material is available. If obvious chromatographic interference with surrogate is present, reanalysis may not be necessary.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-3
QC Samples Table

Matrix	Offsite Backfill
Analytical Group	Radiological Parameters
Concentration Level	Low
Sampling SOP	Worksheet #17-1
Analytical Method/ SOP Reference	PGH-R-023-5
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory personnel	Accuracy, Sensitivity	All target compounds ≤RL
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific data quality objectives. Contact the client as to additional measures to be taken.	Laboratory Personnel	Precision, Accuracy	Should meet NAD criteria of ≤3.92
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes if sufficient sample material is available.	Laboratory personnel	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-4
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP Metals (solid waste characterization to also include copper, nickel, and zinc)
Concentration Level	Low to Medium
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	100.0012, 100.0111
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Calibration blank	Before beginning a sample run, after every 10 samples, and at the end of the analytical sequence	Per QAPP and laboratory SOP	Correct problem. Re-prep and reanalyze calibration blank. All samples following the last acceptable calibration blank must be reanalyzed.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >LOD
Method Blank	One per preparatory	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
ICS (required for method SW846 6010C only)	The beginning of an analytical run	Per QAPP and laboratory SOP	Terminate analysis; locate and correct problem; reanalyze ICS and all samples	Laboratory analyst	Precision, Accuracy	*ICS-A:* Absolute value of concentration for all non-spiked analytes <LOD. *ICS-AB:* Within ±20% of true value

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. If the MS falls outside of criteria, additional quality control tests are required to evaluate matrix effects.	Laboratory analyst	Accuracy	Recovery: 80-120%
Laboratory Duplicate	One per preparatory batch per matrix	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision	RPD ≤20% between sample and sample duplicate
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Recovery: 80-120%
Serial Dilution	One per preparatory batch	Per QAPP and laboratory SOP	*SW846 6010C:* Perform PDS addition *SW846 7470A:* Perform recovery test	Laboratory analyst	Precision, Accuracy	Five-fold dilution must agree within ±10% of the original sample
PDS (required for method SW846 6010C only)	When dilution test fails or analyte concentration in all samples <50x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 75-125%
Recovery Test (required for method SW846 7470A only)	When dilution test fails or analyte concentration in all samples <25x LOD	Per QAPP and laboratory SOP	Run all associated samples in the preparatory batch by MSA or for the specific analytes in the parent sample, apply J flag if acceptance criteria are not met.	Laboratory analyst	Accuracy	Recovery: 85-115%

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-5
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, PCBs
Concentration Level	Low to High
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	60.0003, 60.0006, 60.0034, 70.0011, 90.0012
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem. If required, reprep and reanalyze method blank and all samples processed with the contaminated blank.	Laboratory analyst	Sensitivity, Accuracy	No analytes detected >1/2 RL and >1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Blank result must not otherwise affect sample results. For common laboratory contaminants, no analytes detected >RL.
Surrogate Spike	All field and QC samples	Per QAPP and laboratory SOP	Correct problem then reprep and reanalyze all failed samples for the failed surrogates in the associated preparatory batch, if sufficient sample material is available. If obvious chromatographic interference with surrogate is present, reanalysis may not be necessary.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
MS/MSD	One per preparatory batch	Per QAPP and laboratory SOP	Examine the project-specific DQOs. Contact the client as to additional measures to be taken	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-6
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Reactivity (Sulfide and Cyanide)
Concentration Level	Low
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	100.0015
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Method Blank	One per preparatory batch	Per QAPP and laboratory SOP	Reprocess affected samples in a subsequent preparation batch, except when sample results are below the MDL. If insufficient sample volume remains for reprocessing, the results will be reported with appropriate data qualifiers.	Laboratory analyst	Sensitivity, Accuracy	Absolute values of all analyte concentrations must be ≤ RL
LCS	One per preparatory batch	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Reanalyze	Laboratory analyst	Precision, Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-7
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	Ignitability
Concentration Level	NA
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	100.0024
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC[1]
Laboratory Duplicate	One per batch of 20 samples	Per QAPP and laboratory SOP	Re-prepare and reanalyze	Laboratory analyst	Accuracy	Must meet laboratory in-house control limits (Appendix 4)
LCS	One per batch of 20 samples	Per QAPP and laboratory SOP	Correct problem, then reprep and reanalyze the LCS and all samples in the associated preparatory batch for failed analytes, if sufficient sample material is available.	Laboratory analyst	Precision/Accuracy	Must meet laboratory in-house control limits (Appendix 4)
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

[1] The laboratory will be required to achieve their method-specific control limit criteria.

QAPP Worksheet #28-8
QC Samples Table

Matrix	Solid and Liquid Waste Characterization
Analytical Group	pH
Concentration Level	NA
Sampling SOP	Worksheet #17-2 and #17-3
Analytical Method/ SOP Reference	100.0112
Sampler's Name	TBD
Field Sampling Organization	Sevenson
Analytical Organization	Spectrum
No. of Sample Locations	See Worksheet #18

QC Sample	Frequency/Number	Method/SOP QC Acceptance Limits	CA	Person(s) Responsible for CA	DQI	MPC
Initial Calibration Verification	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Sensitivity	±0.10 pH unit of the temperature adjusted pH value
Continuing Calibration Verification	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Sensitivity	±0.05 pH unit of the temperature adjusted pH value
Laboratory Duplicate	One per preparatory batch	Per QAPP and laboratory SOP	Recalibrate pH meter; reanalyze	Laboratory analyst	Precision	Must agree within ±0.10 pH units
Temperature Blank	One per sample cooler	Per QAPP	Determine effect on project DQOs; proceed with analysis or recollect samples	Sevenson Project Chemist	Accuracy	4±2°C

QAPP Worksheet #29
Project Documents and Records

Sample Collection Documents and Records	On-Site Analysis Documents and Records	Off-Site Analysis Documents and Records	Data Assessment Documents and Records	Other
▫ Field logbooks ▫ Chain of custody records ▫ Air bills ▫ Custody seals ▫ Field Change Request forms ▫ Corrective Action forms ▫ Daily Chemical Quality Control Reports ▫ Photo logs	▫ Not applicable – no onsite analysis will be performed.	▫ Sample receipt, chain of custody forms, and sample tracking records ▫ Equipment calibration logs ▫ Sample preparation logs ▫ Case narrative, data packages ▫ Definition of laboratory qualifiers ▫ Equipment maintenance, testing, and inspection logs ▫ Corrective action forms ▫ Reported field sample results ▫ Electronic data deliverables ▫ Reported results with standards, QC checks, and QC samples ▫ Instrument printouts for field samples, standards, and QC samples ▫ Data package completeness checklists ▫ Technical/QA forms ▫ Data assessment reports ▫ Extraction/cleanup records ▫ Sample disposal records	▫ Field sampling audit checklists ▫ Offsite laboratory audit checklists ▫ Data review reports ▫ Corrective action forms ▫ Telephone logs	▫ Disposal facility waste approval forms ▫ Waste shipping manifests and/or bill-of-lading

QAPP Worksheet #30
Analytical Services Table

Matrix	Analytical Group	Concentration Level	Sample Locations/ID Number	Analytical SOP	Data Package Turnaround Time[1]	Laboratory/ Organization (name and address, contact person and telephone number)	Backup Laboratory/ Organization (name and address, contact person and telephone number)
Offsite backfill	VOCs SVOCs Pesticides PCBs Metals Cyanide Radiological Parameters	Trace to Low	Offsite backfill and topsoil sources	90.0012 70.0011 60.0006 60.0003 100.0012, 100.0111 100.0004 PGH-R-023-5	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.
Solid Waste Characterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	In-situ from predetermined excavation areas	90.0012 70.0011 60.0006 60.0034 100.0012, 100.0111 60.0003 100.0112 100.0024 100.0015 100.0015	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.
Solid Waste Characterization	PCBs	Low to High	In-situ from predetermined excavation areas	60.0003	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.

Matrix	Analytical Group	Concentration Level	Sample Locations/ID Number	Analytical SOP	Data Package Turnaround Time[1]	Laboratory/ Organization (name and address, contact person and telephone number)	Backup Laboratory/ Organization (name and address, contact person and telephone number)
iquid Waste haracterization[2]	TCLP VOCs TCLP SVOCs TCLP Pesticides TCLP Herbicides TCLP Metals PCBs pH Ignitability Reactive Cyanide Reactive Sulfide	Low to High	Storage tanks	90.0012 70.0011 60.0006 60.0034 100.0012, 100.0111 60.0003 100.0112 100.0024 100.0015 100.0015	Preliminary Data: 5 days Full Deliverable: 30 days	Spectrum Agnes Huntley 175 Metro Center Blvd. Warwick, RI 02886 (401) 732-3400	A backup laboratory has not been assigned.

[1] The full deliverable is defined as the complete analytical data report with laboratory quality control results and EDD which will be reviewed by Sevenson. The Sevenson data review will be completed within 7 days of receipt of the full deliverable from the laboratory.
[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #31
Planned Project Assessments Table

Assessment Type	Frequency	Internal or External	Organization Performing Assessment	Person(s) Responsible for Performing Assessment	Person(s) Responsible for Responding to Assessment Findings	Person(s) Responsible for Identifying and Implementing CA	Person(s) Responsible for Monitoring Effectiveness of CA
Specific field procedure assessment and UFP-QAPP compliance	Initially within the first week and the at least quarterly if necessary	Internal	Sevenson self assessment	William Zambrana, Sevenson CQCSM	Sevenson Field Team Leader	Sevenson Field Team Leader	William Zambrana, Sevenson CQCSM Sevenson Field Team Leader
Data review	As data becomes available from the laboratory	Internal and External	Sevenson project chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer	Jennifer Singer, Sevenson Project Chemist Laboratory QA Officer
Data review to assign regulatory status of materials for offsite disposal	As data becomes available from the laboratory	Internal	Sevenson regulatory specialist	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator	Ken Paisley, Sevenson Regulatory Specialist/Waste Disposal Coordinator
Daily field documentation review	Daily	Internal	Sevenson self assessment	William Zambrana, Sevenson CQCSM	Sevenson Field Team Leader	Sevenson Field Team Leader	William Zambrana, Sevenson CQCSM Sevenson Field Team Leader
Health and safety audit	Initially within the first week of field work and then at least quarterly if necessary	Internal	Sevenson self assessment	Eric Tschudi, Sevenson SSHO	Kim Lickfield, Sevenson Project Manager	Sevenson Field Team Leader	Eric Tschudi, Sevenson SSHO

QAPP Worksheet #32
Assessment Findings and Corrective Action Responses

Assessment Type	Nature of Deficiencies Documentation	Individual(s) Notified of Findings	Timeframe of Notification	Nature of Corrective Action Response Documentation	Individual(s) Receiving Corrective Action Response	Timeframe for Response
Data validation	Laboratory resubmissions	Laboratory QA officer	After arrival of data from the lab and during data validation activities	Corrective action reports and/or updated case narratives and corrected data submissions	Jennifer Singer, Sevenson Project Chemist	7 business days
Daily field documentation reviews	Internal letter and any verification documentation	Kim Lickfield, Sevenson Project Manager	1 business day	Plan for correction and verification that correction is complete	Kim Lickfield, Sevenson Project Manager	1 business day
Internal project reporting reviews	Internal report comments	Kim Lickfield, Sevenson Project Manager	7 business days	Response to comment and applicable report correction	Kim Lickfield, Sevenson Project Manager	7 business days
Health and safety audit	Written audit report	Kim Lickfield, Sevenson Project Manager	3-5 business days	Letter and any verification documentation	Sevenson Field Team Leader	24 hours after notification

QAPP Worksheet #33
QA Management Reports Table

Type of Report	Frequency	Projected Delivery Date(s)	Person(s) Responsible for Report Preparation	Report Recipient(s)
Daily Chemical Quality Control Report	Daily during field work	Duration of field activities	Sevenson Field Team Leader	Kim Lickfield, Sevenson Project Manager USACE
Field Audit Report	Initially within the first two weeks of field work and with follow-up audits if significant deficiencies are found	Month after field work begins	William Zambrana, Sevenson CQCSM	Kim Lickfield, Sevenson Project Manager
Corrective Action Report	When corrective action is required	When corrective action is implemented	William Zambrana, Sevenson CQCSM	Kim Lickfield, Sevenson Project Manager
Data Review Report	After laboratory data is received	Within 45 days after receiving data	Jennifer Singer, Sevenson Project Chemist	William Zambrana, Sevenson CQCSM Kim Lickfield, Sevenson Project Manager
Quality Control Summary Report	After all lab data is received and reviewed	Within 45 days after receipt of the last laboratory data report	Jennifer Singer, Sevenson Project Chemist	USACE, USEPA
Health and Safety Audit	Once	Submitted with Final Reports	Eric Tschudi, Sevenson SSHO	USACE, USEPA

QAPP Worksheet #34
Verification (Step I) Process Table

Verification Input	Description	Internal/ External	Responsible for Verification
Chain of custody and shipping forms	COC forms and shipping documentation will be reviewed internally upon their completion and verified against the packed sample coolers they represent. The shipper's signature on the COC will be initialed by the reviewer, a copy of the COC retained in the site files, and the original and remaining copies taped inside the cooler for shipment. Refer to Worksheet #27 for additional details.	Internal	William Zambrana, Sevenson
Audit reports	Upon report completion, a copy of all audit reports will be placed in the site file. If corrective actions are required, a copy of the documented corrective action will be attached to the appropriate audit report in the site file. Copies of Sevenson's internal QC checklists, corrective action forms, and field change request forms are included in Appendix 5.	Internal	William Zambrana, Sevenson
Field notes	Field notes will be reviewed internally at the end of each working day and placed in the site file.	Internal	William Zambrana, Sevenson
Laboratory data	All laboratory packages will be verified internally by the laboratory performing the work for completeness and technical accuracy prior to submittal. All data packages will be verified internally by the Sevenson project chemist or designee according to the data review procedures specified in Worksheet #36.	Internal/External	Laboratory QA Officer Jennifer Singer, Sevenson
UFP-QAPP	All planning documents will be available to reviewers to allow reconciliation with planned activities and objectives.	Internal	William Zambrana, Sevenson Jennifer Singer, Sevenson

QAPP Worksheet #35
Validation (Steps IIa and IIb) Process Table

Step IIa / IIb	Validation Input	Description	Responsible for Validation
IIa	Laboratory data packages	Ensure that all analytical procedures were followed. Corrective actions will be taken and documented when applicable per specific methods. Data will be qualified in accordance with specific methods. Any deviations will be documented.	Laboratory personnel Jennifer Singer, Sevenson
IIa	Documentation of method QC results	Establish that all method required QC samples were run and met required limits.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Documentation of UFP-QAPP QC sample results	Establish that all UFP-QAPP required QC samples were run and met required limits.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Project quantitation limits	All sample results met the project quantitation limit specified in the UFP-QAPP.	Laboratory personnel Jennifer Singer, Sevenson
IIb	Sampling procedures	Evaluate whether sampling procedures were followed with respect to equipment and proper sampling support.	William Zambrana, Sevenson Jennifer Singer, Sevenson
IIb	Deviations (sampling and analysis)	Determine the impacts of any deviations from sampling or analytical methods and SOPs	William Zambrana, Sevenson Jennifer Singer, Sevenson USACE USEPA

QAPP Worksheet #36
Validation (Steps IIa and IIb) Summary Table

Step IIa / IIb	Matrix	Analytical Group	Concentration Level	Validation Criteria	Data Validator
IIa/IIb	Offsite backfill	Metals, cyanide, VOCs, SVOCs, PCBs, pesticides, and radiological parameters	Trace to Low	USEPA Region II Criteria[1] *Radiological:* MARLAP, Chapter 8, Section 5	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Solid Waste Characterization[2]	TCLP VOCs, SVOCs, Pesticides, Herbicides, Metals PCBs RCRA Characteristics (pH, ignitability, reactive cyanide, reactive sulfide)	Low to High	USEPA Region II Criteria[1]	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Solid Waste Characterization	PCBs	Low to High	USEPA Region II Criteria[1]	Jennifer Singer, Sevenson Data Quality Control Review Chemist
IIa/IIb	Liquid Waste Characterization[1]	TCLP VOCs, SVOCs, Pesticides, Herbicides, Metals PCBs RCRA Characteristics (pH, ignitability, reactive cyanide, reactive sulfide)	Low to High	USEPA Region II Criteria[1]	Jennifer Singer, Sevenson Data Quality Control Review Chemist

[1] Data will be reviewed using ADR software as discussed in Worksheet #11 for the parameters included in Worksheet #14. PCB calibration and radiological results will be reviewed manually. The software was developed based on USEPA Region II criteria. USEPA Region II criteria include: *CLP Organics Data Review and Preliminary Data Review* (SOP #HW-6, Revision #14, September 2006) and *Validation of Metals for the CLP Based on SOW ILM05.3* (SOP #HW-2, Revision #13, September 2006).
[2] Additional analytes may be required by the offsite disposal facility. The Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the analytical requirements.

QAPP Worksheet #37
Usability Assessment

Summarize the usability assessment and all procedures, including interim steps and any statistics, equations, and computer algorithms that will be used:

It is the responsibility of the Sevenson Project Chemist and the laboratory to ensure that the data meet the method detection limits, reporting limits, and laboratory QC limits listed in the UFP-QAPP. During the data validation assessment, non-conformances are documented and data are qualified for use in decision making. The data are determined to be usable by the Project Chemist based on the requirements of this UFP-QAPP. Data gaps will be present if a sample is not collected, a sample is not analyzed for the requested parameters, or the data are determined to be unusable. The need for further investigation will be determined on a case-by-case basis, depending on whether data can be extrapolated from adjacent sampling locations, and whether or not the results are unnecessary based on the results from adjacent locations. All data are usable as qualified by the data validator, with the exception of rejected data. Estimated and/or biased results are usable.

Describe the evaluative procedures used to assess overall measurement error associated with the project:

In depth assessment occurs during the data validation process. The validation will follow approved USEPA Region 2 Guidelines and SOPs to assess conformance with the requirements of the methods, SOPs, and objectives of this UFP-QAPP. The findings of the data validation will generate qualifiers applied to the data considered in context to assess overall usability of the data.

Identify the personnel responsible for performing the usability assessment:

Jennifer Singer, Sevenson Project Chemist

Describe the documentation that will be generated during usability assessment and how usability assessment results will be presented so that they identify trends, relationships (correlations), and anomalies:

The data validation reports will identify precision and accuracy exceedances with respect to the laboratory performance for each batch of samples, as well as comparability of field and laboratory duplicates. All the results will be assembled and reported for an overall quality assessment provided in the QCSR and final project report. Discussion will cover precision, accuracy/bias, sensitivity, representativeness, comparability, completeness, and reconciliation, defined as follows.

Precision. Results of laboratory duplicates will be assessed during data review and data will be qualified according to the data review procedures cited on Worksheet #36. Field duplicate samples will not be collected due to the limited nature of the sampling. A discussion summarizing the results of laboratory precision and any limitations on the use of the data will be described in the QCSR.

Accuracy/Bias Contamination. Results of laboratory blanks will be assessed as part of data review. During the review process the reviewer will qualify the data following the procedures described on Worksheet #36. A discussion summarizing the results of laboratory accuracy and bias based on contamination will be presented and any limitation on the use of the data will be described in the QCSR.

Overall Accuracy/Bias. The results of matrix spike recoveries will be reviewed and data will be qualified according to the data review procedures cited on Worksheet #36. A discussion summarizing the results of laboratory accuracy and any limitations on the use of the data will be described in the QCSR.

Sensitivity. Data results will be compared to clean-up criteria provided on Worksheet #15. A discussion summarizing any conclusions about the sensitivity of the analyses will be presented and any limitations on the use of the data will be described in the QCSR.

Representativeness. A review of adherence to field procedures and of project quality control audits will be performed in order to assess the representativeness of the sampling program. Data review narratives will also be reviewed and any conclusions about the representativeness of the data set will be discussed.

Comparability. Data will be collected, analyzed, and reported in a manner that is comparable to the existing site data.

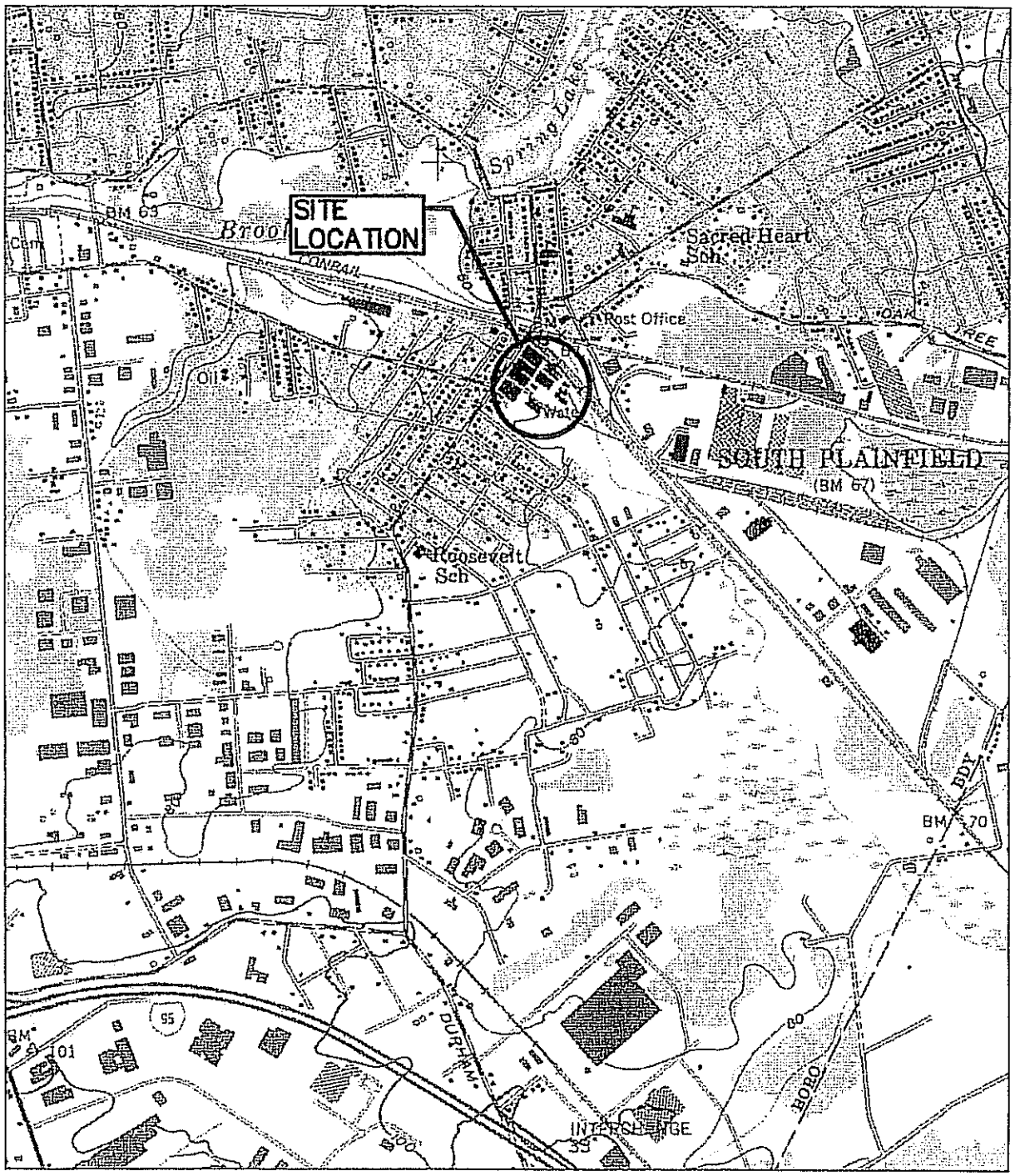
Completeness. A completeness check will be done on all data generated by the laboratory. Completeness will be calculated for each analyte as follows. For sampling, completeness will be calculated as the number of samples collected and analyzed by the laboratory divided by the number planned for collection. Also for each analyte, completeness will be calculated as the number of data points for each analyte that meets measurement performance criteria divided by the total number of data points for that analyte. A discussion summarizing the results of project completeness and any limitations on the use of the data will be described in the QCSR.

Reconciliation. The project quality objectives presented in Worksheet #12 will be examined to determine if the objective was met. This examination will include a combined overall assessment of the results of each analysis pertinent to an objective. Each analysis will first be evaluated separately in terms of major impacts observed from data review, data quality indicators, and measurement performance criteria assessments. Based on the results of these assessments, the quality of the data will be determined. Based on the quality determined, the usability of the data for each analysis will be determined. Based on the combined usability of the data from all analyses for an objective, it will be determined if the project quality objective was met and whether project goals were achieved. As part of the reconciliation of each objective, conclusions will be drawn and any limitations on the usability of any of the data will be described.

Page intentionally left blank

APPENDIX 1

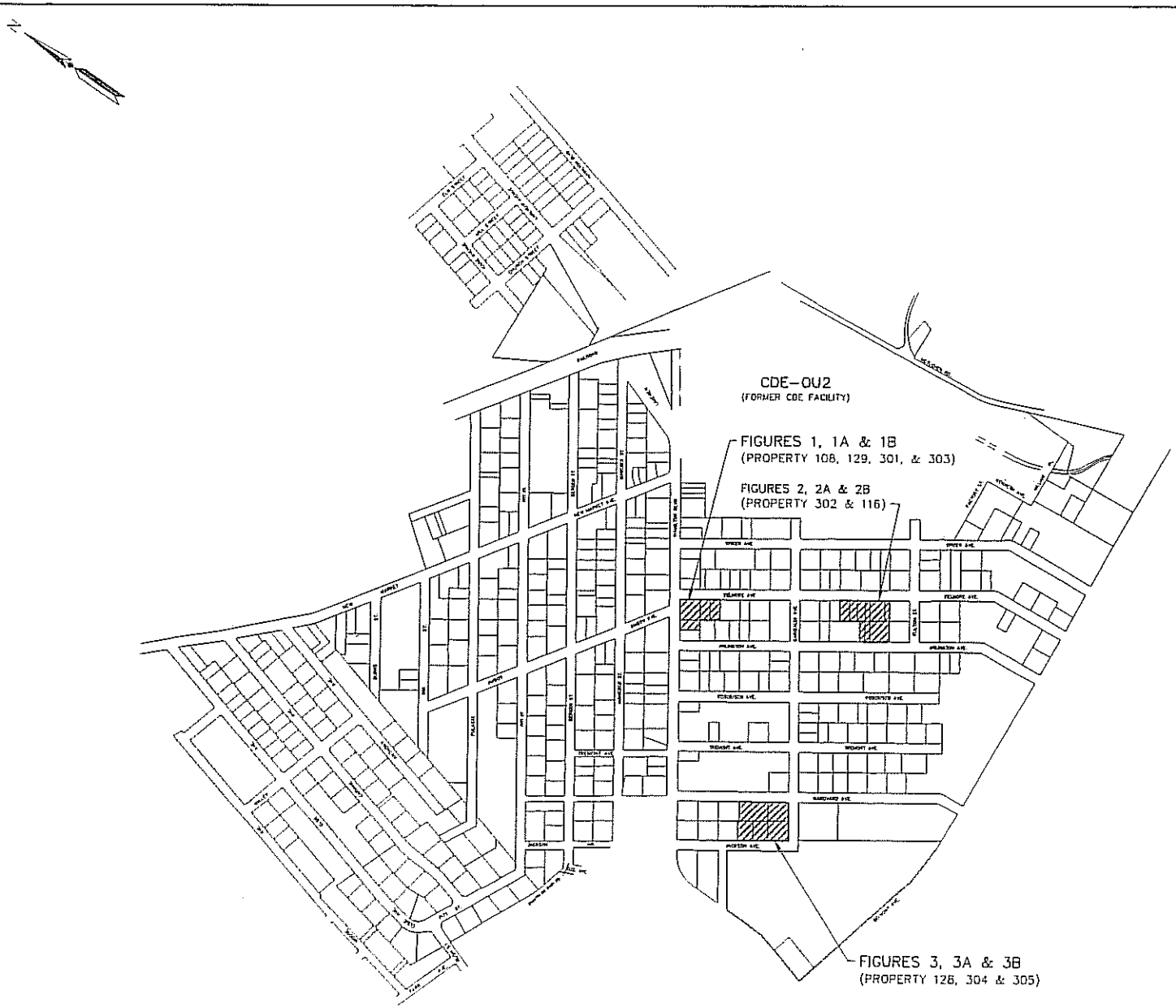
FIGURES



SOURCE: U.S.G.S. TOPOGRAPHIC MAP,
7.5 MINUTE SERIES, PLAINFIELD, NEW JERSEY
QUADRANGLE, 1955, PHOTOREVISED 1981

MALCOLM PIRNIE	U.S. ARMY CORPS OF ENGINEERS CORNELL–DUBILIER SUPERFUND SITE OU–2 SOILS SOUTH PLAINFIELD, NEW JERSEY CONTRACT NO. W912DQ–06–D–0006 TO 0001	SITE LOCATION MAP SCALE AS NOTED	MALCOLM PIRNIE, INC. JULY 2007 FIGURE 1–1

User: ...OND Spec: PIRNIE STANDARD File: I:\ACAD\PROJ\4553033\CLIENT\BUFFALO\04-03-07\Site-LOC-4553023-6.DWG Scale: 1:1 Date: 07/17/2007 Time: 15:36 Layout: FIGURE 1



KEY MAP
NOT TO SCALE

ARCADIS

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
KEY MAP

JOB NO:
CONTRACT NO:

SHEET NAME: K-1	DRAWN BY: R. IANICELLI
	DESIGNED BY: A. MASON
SHEET 3 OF 11	CHECKED BY: B. GRIARD
FILE NAME:	DATE: JANUARY 2012

TABLE 1a.E. EXCAVATION POINT	GRID COORDINATE TABLE Y=NORTHING	X=EASTING
A1	634411	515616
A2	634384	515597
A3	634364	515624
A4	634397	515643
B1	634384	515597
B2	634369	515595
B3	634357	515633
B4	634351	515614
B5	634364	515624
C1	634366	515564
C2	634328	515557
C3	634276	515630
C4	634272	515627
C5	634269	515632
C6	634265	515630
C7	634261	515635
C8	634269	515640
C9	634281	515648
C10	634300	515623
C11	634309	515629
C12	634330	515600
C13	634342	515609
C14	634354	515599
C7	634261	515635
C8	634281	515648
C9	634300	515623
C10	634309	515629
C11	634330	515600
C12	634342	515609
C13	634354	515599
D1	634417	515644
D2	634413	515610
D3	634373	515676
D4	634377	515678
E1	634365	515681
E2	634344	515666
E3	634340	515666
E4	634334	515672
E5	634326	515681
E6	634352	515699
F1	634353	515653
F2	634347	515649
F3	634343	515655
F4	634349	515659
G1	634352	515699
G2	634306	515666
G3	634302	515675
G4	634320	515687
G5	634322	515685
G6	634329	515690
G7	634329	515711
G8	634333	515718
H1	634306	515666
H2	634297	515639
H3	634292	515697
H4	634247	515708
H5	634267	515708
H6	634297	515727
H7	634305	515715
H8	634287	515702
H9	634290	515697
H10	634264	515690
H11	634260	515699
H12	634266	515689
H13	634263	515693
H14	634244	515679
H15	634257	515662
H16	634274	515675
H17	634287	515690
H18	634301	515673
H19	634239	515680
H20	634241	515683
I1	634264	515651
I2	634279	515647
I3	634274	515655
I4	634279	515659

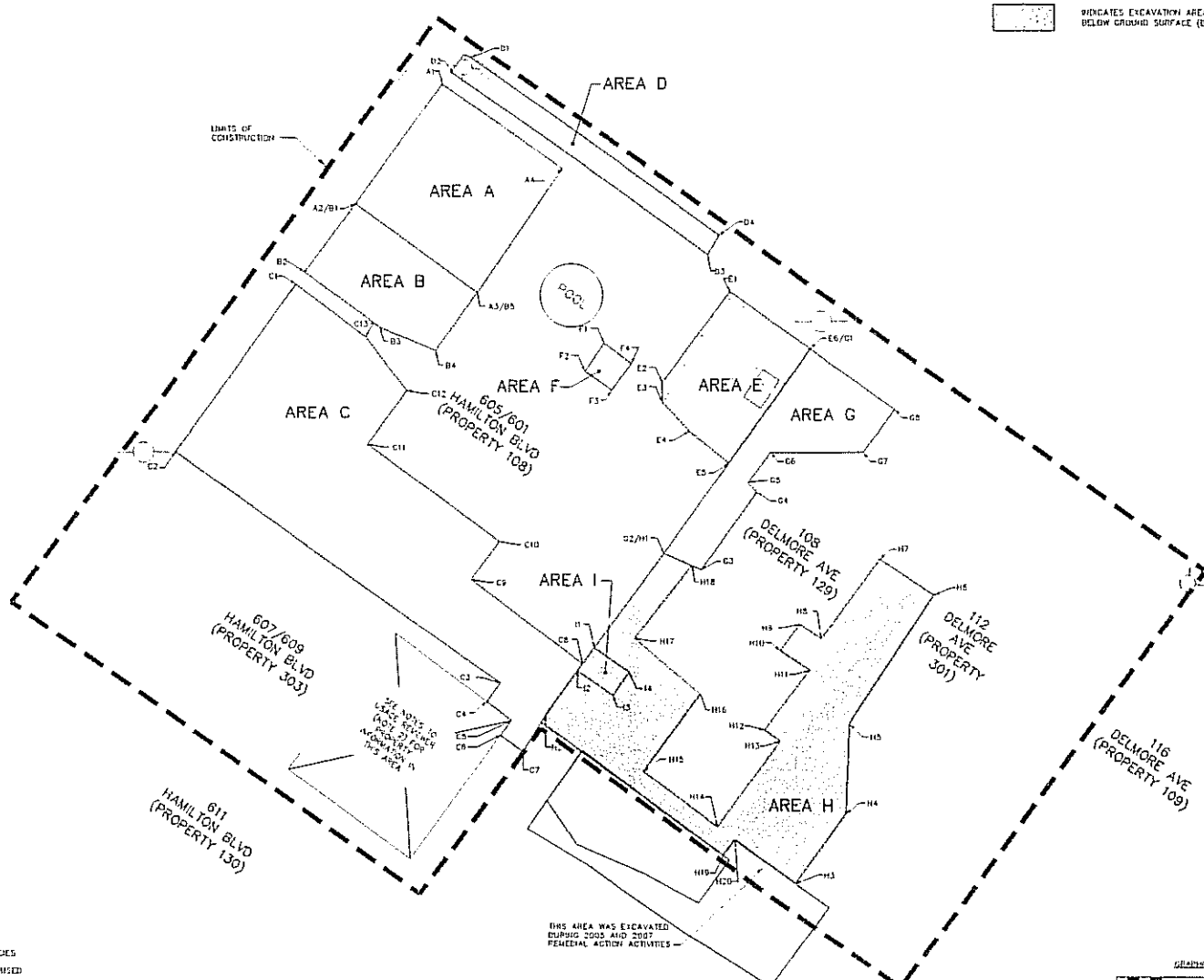
TABLE 1b – VOLUME OF EXCAVATION		
AREA	SQ. FT.	VOLUME
A	1125	42 CY
B	627	12 CY
C	3054	57 CY
D	255	5 CY
E	681	30 CY
F	55	4 CY
G	719	14 CY
H	2142	160 CY
I	62	8 CY
TOTAL EXCAVATION VOLUME		332 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER
3. CONTRACTOR SHALL EXCAVATE UP TO THE PREVIOUSLY EXCAVATED AREA ON 109 ARLINGTON. IT IS ESTIMATED THAT THIS WILL BE 2 TO 3 FEET ONTO THE PROPERTY. CONTRACTOR SHALL CONFIRM VISUALLY IN THE FIELD

LEGEND

- INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–30" BELOW GROUND SURFACE (BGS)



GRAPHIC SCALE

SCALE: 1" = 10'-0"

NOTES TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED
2. PROPERTY FEATURES AT THIS LOCATION ARE BEING CONFIRMED BY SURVEYOR. EXACT LOCATION OF PAVEMENT TO BE CONFIRMED

ARCADIS

REVISIONS

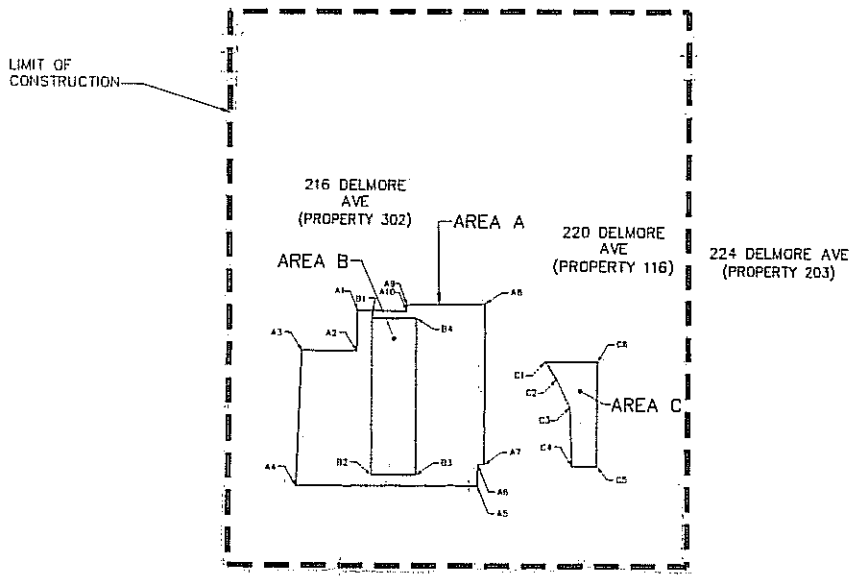
No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME: OU-1 REMEDIAL DESIGN CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE: PROPERTY 108, 129, 301 & 303 EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE 1A
SHEET 1 OF 15
FILE NAME:
DRAWN BY: K. IANCELLI
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
DATE: JANUARY 2012



LEGEND

INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-24" BELOW GROUND SURFACE (BGS)

TABLE 2a EXCAVATION COORDINATE TABLE		
EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633866	516261
A2	633851	516250
A3	633888	516247
A4	633867	516231
A5	633845	516261
A6	633849	516263
A7	633848	516265
A8	633874	516263
A9	633883	516270
A10	633882	516269
B1	633885	516263
B2	633859	516244
B3	633854	516245
B4	633880	516270
C1	633857	516287
C2	633853	516288
C3	633847	516285
C4	633837	516278
C5	633834	516283
C6	633851	516295

TABLE 2b - VOLUME OF EXCAVATION		
AREA	SQ. FT.	VOLUME
A	872	19 CY
B	791	22 CY
C	126	11 CY
TOTAL EXCAVATION VOLUME		52 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 2a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED.

GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1" = 10'-0"

ARCADIS

REVISIONS:

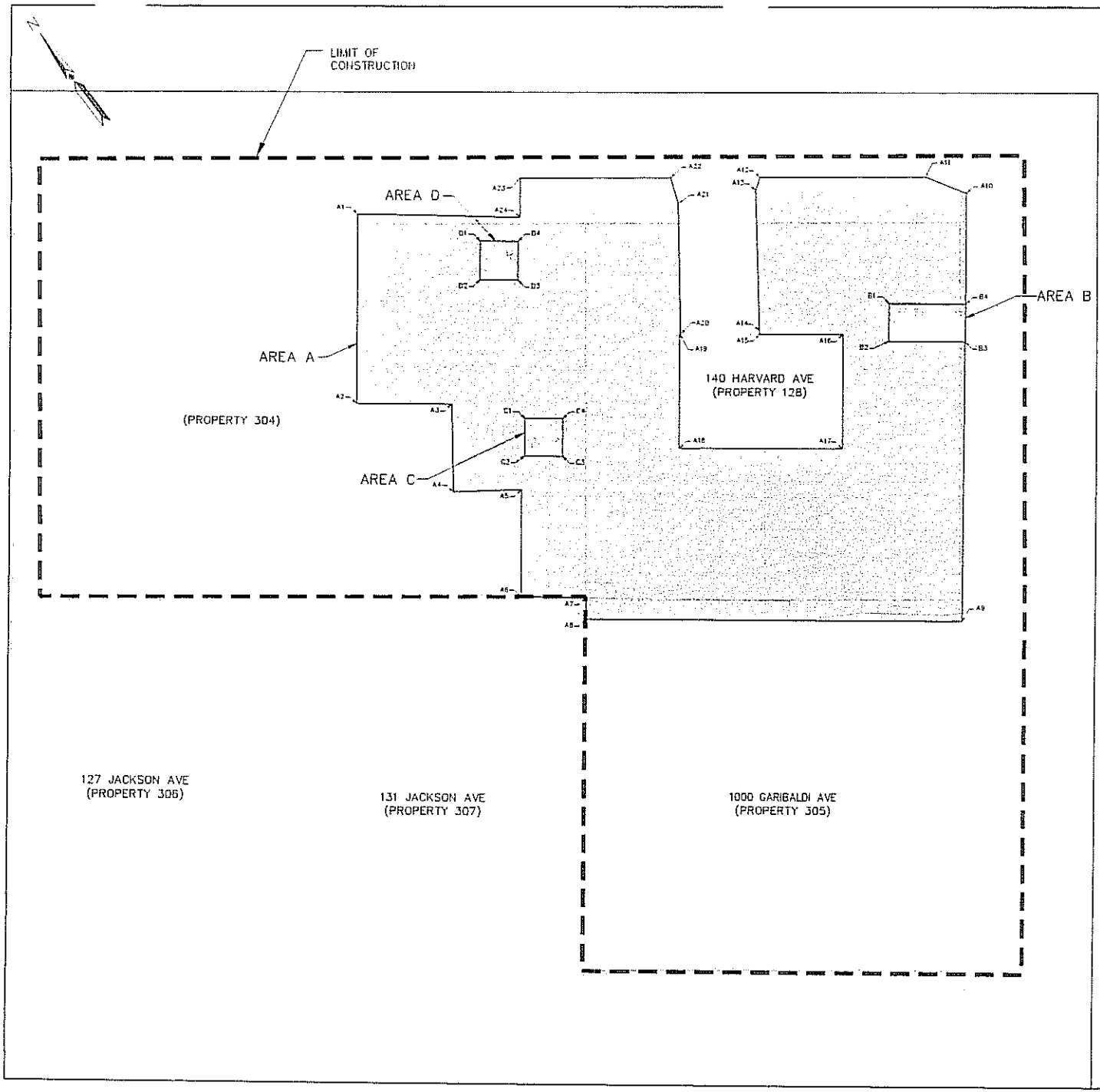
No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT TITLE
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 116 & 302
EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE 2A
SHEET 10 OF 15
FILE NAME:
DRAWN BY: K. IANICELI
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
DATE: JANUARY 2012



LEGEND

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.

TABLE 3a - EXCAVATION POINTS

EXCAVATION POINT	Y-NORTHING	X-EASTING
A1	633371	515352
A2	633331	515333
A3	633316	515343
A4	633297	515333
A5	633280	515345
A6	633293	515329
A7	633253	515342
A8	633248	515339
A9	633183	515420
A10	633280	515467
A11	633280	515481
A12	633316	515445
A13	633314	515442
A14	633284	515421
A15	633283	515421
A16	633270	515439
A17	633245	515421
A18	633271	515388
A19	633298	515404
A20	633295	515401
A21	633323	515423
A22	633330	515428
A23	633353	515392
A24	633345	515387
B1	633283	515454
B2	633281	515448
B3	633243	515464
B4	633257	515470
C1	633301	515357
C2	633293	515351
C3	633297	515359
C4	633293	515352
D1	633346	515375
D2	633336	515369
D3	633332	515377
D4	633340	515383

TABLE 3b – VOLUME OF EXCAVATION

AREA	SQ. FT.	VOLUME
A	27,700	2057 CY
B	204	30 CY
C	100	9 CY
D	100	9 CY
TOTAL EXCAVATION VOLUME		2105 CY

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED

GRAPHIC SCALE

10' 0 10' 20' 30'

SCALE: 1" = 10'-0"

ARCADIS

REVISIONS

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME: OU-1 REMEDIAL DESIGN CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE: PROPERTY 128, 304 & 305 EXCAVATION PLAN

WO NO:

CONTRACT NO:

SHEET NAME: FIGURE 3A

SHEET 13 OF 15

FILE NAME:

DRAWN BY: K. MARCELL

DESIGNED BY: A. MASON

CHECKED BY: D. GRIANO

DATE: JANUARY 2012

APPENDIX 2

DATA NEEDS TABLE

Appendix 2

Data Needs Table

Operable Unit 1 – Soil Remediation
Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Data Need	Data User	Parameter	Method	Quantitation Limits	Rationale for Analysis	Data Use
Offsite backfill and topsoil	Remedial action team	VOCs	SW846 8260B	See Worksheet #15 for project QLs	Parameters required by NJAC 7:26D.	Will be used by the remedial action team to verify that offsite backfill and topsoil meet the requirements of the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) prior to bringing the materials to the site
		SVOCs	SW846 8270D			
		Pesticides	SW846 8081B			
		PCBs	SW846 8082A			
		Metals and Mercury	SW846 6010C/7471B			
		Cyanide	SW846 9012B			
		Radiological Parameters	HASL-300 or equivalent gamma spectroscopy method			
Solid waste characterization	Remedial action team, offsite disposal facility	Ignitability	SW846 1010	See Worksheet #15 for project QLs	Parameters required by offsite disposal facility for waste characterization. Additional analyses may be performed at the direction of the offsite disposal facility. Sevenson's Waste Disposal Coordinator should be contacted prior to sample collection in order to verify the list of required laboratory analyses.	Will be used to characterize the waste for disposal at the appropriate offsite disposal facility
		pH	SW846 9045D SW846 9040C			
		Reactive Cyanide	SW846 Section 7.4.3.2			
		Reactive Sulfide	SW846 Section 7.4.4.3			
		TCLP Metals and Mercury	SW846 6010C/7470A			
		TCLP SVOCs	SW846 8270D			
		TCLP Pesticides	SW846 8081B			
		TCLP Herbicides	SW846 8151A			
		PCBs	SW846 8082A			
		TCLP VOCs	SW-846 8260B			

Data Need	Data User	Parameter	Method	Quantitation Limits	Rationale for Analysis	Data Use
Liquid waste characterization	Remedial action team, offsite disposal facility	Ignitability	SW846 1010	See Worksheet #15 for project QLs	Parameters required by offsite disposal facility for waste characterization.	Will be used to characterize the waste for disposal at the appropriate offsite disposal facility
		pH	SW846 9045D SW846 9040C			
		Reactive Cyanide	SW846 Section 7.4.3.2			
		Reactive Sulfide	SW846 Section 7.4.4.3			
		TCLP Metals and Mercury	SW846 6010C/7470A			
		TCLP SVOCs	SW846 8270D			
		TCLP Pesticides	SW846 8081B			
		TCLP Herbicides	SW846 8151A			
		PCBs	SW846 8082A			

APPENDIX 3

DATA QUALITY OBJECTIVES

Appendix 3

Data Quality Objectives

Operable Unit 1 – Soil Remediation
Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Data quality objectives (DQOs) are used to help decision makers collect data of the right type, quality, and quantity to support decisions. The approach to developing DQOs is designed to take decision makers through a strategic planning process from broad project goals through a number of refining steps towards generating environmental data that will be appropriate to making the decisions needed to reach the goals.

1.0 State the Problem

Work is being conducted at properties located in the vicinity of the former Cornell-Dubilier Electronics facility due to contamination found in soil associated with past industrial operations conducted at the facility. Elevated concentrations of contaminants of concern in soils, primarily polychlorinated biphenyls (PCBs) may pose a threat through direct contact and as a source of contamination to groundwater.

This task addresses the remediation of soils associated with Operable Unit 1 (OU-1) of the site. The USEPA signed a Record of Decision (ROD) for OU-1 in September 2003. The objectives of the current remedial action are:

- Excavation of an estimated 2,500 cubic yards of contaminated soil, backfilling with clean fill, and property restoration, as necessary.
- Transportation of contaminated soil to an offsite facility for disposal, with treatment as necessary.

2.0 Identify the Decision

To meet the objectives, the following fundamental questions will need to be answered during the investigation:

- Do backfill and topsoil materials brought in from offsite sources pose a risk to human health or the environment?

- What are the disposal facility requirements to classify the soils and debris excavated from the site under Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) regulations?

3.0 Identify the Inputs to the Decision

The following inputs are required to answer the fundamental questions identified in Step 2 above:

- Review existing data. This includes analytical data as well as past practice and process history.
- Determine the appropriate analytical methods, keeping in mind that the methods must meet the sensitivities of the applicable regulatory limits and remediation goals.
- Collect soil samples to fully characterize the soils such that the offsite disposal facilities are satisfied.
- Collect backfill and topsoil samples to demonstrate that materials brought onsite are not hazardous to human health or the environment.

4.0 Define the Boundaries of the Study

The physical boundaries of the investigation have been defined as OU-1.

5.0 Develop a Decision Rule

The purpose of this step is to integrate the outputs from the previous steps into a statement that defines the conditions that would cause the decision makers to choose among alternative actions. The following primary decision rules will be used to answer the fundamental questions:

- Waste characterization sample results will be compared against the 40CFR261 *Characteristics of Hazardous Waste* and 40CFR761 *PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* to determine the disposal requirements. Any materials containing Resource Conservation and Recovery Act (RCRA) regulated constituents at concentrations greater than toxicity characteristic leachate procedure (TCLP) criteria will be disposed of as RCRA hazardous waste. Any materials containing concentrations of total PCBs greater than the regulatory standards will be disposed of as Toxic Substance Control Act (TSCA) regulated PCB remediation wastes. Any materials exceeding both criteria will be disposed of as RCRA/TSCA waste.

- Material used for backfill will be analyzed for organic compounds, inorganic compounds, and radioisotopes to ensure that the fill material does not exceed the cleanup criteria in New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Remediation Standards (RDCSRS) for chemical parameters and NJAC 7:28-12 for naturally occurring radioactive material (NORM).

6.0 Specify Limits on Decision Errors

This step is to specify the decision maker's acceptable limits on decision errors, which are used to establish appropriate performance goals for limiting uncertainty in environmental data. These acceptable limits on decision errors allow decision makers to generate effective sampling designs while limiting uncertainties in the collected data.

There are two types of decision errors applicable to estimating the true value of a population: 1) sampling design error, which occurs when the sampling design is unable to capture the complete state of natural variability over space and time; and 2) measurement error, which refers to a combination of random and systematic errors. The combination of sampling design error and measurement error is termed as the total study error. Since it is impossible to eliminate error in measurement data, two types of decision errors can occur: Type I and Type II. A Type I or false positive error occurs when a null hypothesis is true, but is mistakenly rejected. A Type II or false negative error occurs when a null hypothesis is false, but is not rejected.

In this investigation, the false rejection error is concluding that soils do not contain contaminants of concern with concentrations exceeding the action levels when there are actually contaminants of concern with concentrations that exceeded the action levels. The false acceptance error is concluding that the soils do contain contaminants of concern with concentrations that exceeded the action levels when there are actually no contaminants of concern with concentrations that exceeded the action levels.

The consequences of the false acceptance decision will be unnecessary expenditure of resources such as funding, personnel, and time. The consequence of the false rejection error is that contaminants of concern in soils will not be remediated and will pose unacceptable risk to the environment or human health. Because of the possible severity of the false rejection error consequence, the false acceptance error is more tolerable than the false rejection error. The false acceptance decision error will occur when the

analytical results are biased high and the false rejection decision error will occur when the analytical results are biased low.

7.0 Optimize the Design for Obtaining Data

This step involves identifying the most resource effective sampling and analysis design for generating data that are expected to satisfy project DQOs.

The consequence of the decision error will need to be balanced against the cost of limiting the possibility of these errors. These errors will be managed by the use of precise and accurate analytical methods, sampling techniques (e.g., compositing for waste characterization), and duplicate sample analysis. To minimize unacceptable errors, laboratory analyses with a high degree of confidence and extensive quality assurance and quality control (QA/QC) and documentation procedures will be utilized.

APPENDIX 4

MEASUREMENT PERFORMANCE CRITERIA

Project Target Analyte Reporting Limit, Blank Contamination, and Lab & Field Duplicate RPD Criteria

eQapp Name: Cornell_OU1_Spectrum (090612)
Description: Cornell_OU1_Spectrum (revised 090612)

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 6010B **Matrix:** SO							
ALUMINUM	7429-90-5	10		mg/Kg	5.00	20.00	35.00
ANTIMONY	7440-36-0	1		mg/Kg	5.00	20.00	35.00
ARSENIC	7440-38-2	1		mg/Kg	5.00	20.00	35.00
BARIUM	7440-39-3	10		mg/Kg	5.00	20.00	35.00
BERYLLIUM	7440-41-7	0.25		mg/Kg	5.00	20.00	35.00
CADMIUM	7440-43-9	0.25		mg/Kg	5.00	20.00	35.00
CHROMIUM	7440-47-3	1		mg/Kg	5.00	20.00	35.00
COBALT	7440-48-4	2.5		mg/Kg	5.00	20.00	35.00
COPPER	7440-50-8	1.5		mg/Kg	5.00	20.00	35.00
LEAD	7439-92-1	0.5		mg/Kg	5.00	20.00	35.00
MANGANESE	7439-96-5	2.5		mg/Kg	5.00	20.00	35.00
NICKEL	7440-02-0	2.5		mg/Kg	5.00	20.00	35.00
SELENIUM	7782-49-2	1.5		mg/Kg	5.00	20.00	35.00
SILVER	7440-22-4	1.5		mg/Kg	5.00	20.00	35.00
THALLIUM	7440-28-0	1		mg/Kg	5.00	20.00	35.00
VANADIUM	7440-62-2	2.5		mg/Kg	5.00	20.00	35.00
ZINC	7440-66-6	2.5		mg/Kg	5.00	20.00	35.00
Method: 6010B-TCLP **Matrix:** SO							
ARSENIC	7440-38-2	20		ug/L	5.00	20.00	35.00
BARIUM	7440-39-3	200		ug/L	5.00	20.00	35.00
CADMIUM	7440-43-9	5		ug/L	5.00	20.00	35.00
CHROMIUM	7440-47-3	20		ug/L	5.00	20.00	35.00
LEAD	7439-92-1	10		ug/L	5.00	20.00	35.00
SELENIUM	7782-49-2	30		ug/L	5.00	20.00	35.00
SILVER	7440-22-4	30		ug/L	5.00	20.00	35.00
Method: 7470A-TCLP **Matrix:** SO							
MERCURY	7439-97-6	0.20		ug/L	5.00	20.00	35.00

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 7471A	**Matrix: SO**							
MERCURY		7439-97-6	0.033		mg/Kg	5.00	20.00	35.00
Method: 8081A	**Matrix: SO**							
4,4'-DDD		72-54-8	3.3		ug/Kg	5.00		35.00
4,4'-DDE		72-55-9	3.3		ug/Kg	5.00		35.00
4,4'-DDT		50-29-3	3.3		ug/Kg	5.00		35.00
ALDRIN		309-00-2	1.7		ug/Kg	5.00		35.00
ALPHA-BHC		319-84-6	1.7		ug/Kg	5.00		35.00
ALPHA-CHLORDANE		5103-71-9	1.7		ug/Kg	5.00		35.00
BETA-BHC		319-85-7	1.7		ug/Kg	5.00		35.00
DIELDRIN		60-57-1	3.3		ug/Kg	5.00		35.00
ENDOSULFAN I		959-98-8	1.7		ug/Kg	5.00		35.00
ENDOSULFAN II		33213-65-9	3.3		ug/Kg	5.00		35.00
ENDOSULFAN SULFATE		1031-07-8	3.3		ug/Kg	5.00		35.00
ENDRIN		72-20-8	3.3		ug/Kg	5.00		35.00
GAMMA-BHC		58-89-9	1.7		ug/Kg	5.00		35.00
GAMMA-CHLORDANE		5103-74-2	1.7		ug/Kg	5.00		35.00
HEPTACHLOR		76-44-8	1.7		ug/Kg	5.00		35.00
HEPTACHLOR EPOXIDE		1024-57-3	1.7		ug/Kg	5.00		35.00
METHOXYCHLOR		72-43-5	17		ug/Kg	5.00		35.00
TOXAPHENE		8001-35-2	170		ug/Kg	5.00		35.00
Method: 8081A-TCLP	**Matrix: SO**							
CHLORDANE (TECHNICAL)		57-74-9	2.5		ug/L	5.00	25.00	35.00
ENDRIN		72-20-8	0.1		ug/L	5.00	30.00	35.00
GAMMA-BHC		58-89-9	0.05		ug/L	5.00	30.00	35.00
HEPTACHLOR		76-44-8	0.05		ug/L	5.00	30.00	35.00
HEPTACHLOR EPOXIDE		1024-57-3	0.05		ug/L	5.00	30.00	35.00
METHOXYCHLOR		72-43-5	0.5		ug/L	5.00	30.00	35.00
TOXAPHENE		8001-35-2	5		ug/L	5.00	25.00	35.00
Method: 8082	**Matrix: SO**							
AROCLOR 1016		12674-11-2	33		ug/Kg	5.00		35.00
AROCLOR 1221		11104-28-2	33		ug/Kg	5.00		35.00
AROCLOR 1232		11141-16-5	33		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8082 **Matrix: SO**							
AROCLOR 1242	53469-21-9	33		ug/Kg	5.00		35.00
AROCLOR 1248	12672-29-6	33		ug/Kg	5.00		35.00
AROCLOR 1254	11097-69-1	33		ug/Kg	5.00		35.00
AROCLOR 1260	11096-82-5	33		ug/Kg	5.00		35.00
Method: 8151A-TCLP **Matrix: SO**							
2,4,5-TP	93-72-1	0.33		ug/L	5.00	30.00	35.00
2,4-D	94-75-7	3.3		ug/L	5.00	30.00	35.00
Method: 8260B **Matrix: SO**							
1,1,1-TRICHLOROETHANE	71-55-6	5		ug/Kg	5.00		35.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	5		ug/Kg	5.00		35.00
1,1,2-TRICHLOROETHANE	79-00-5	5		ug/Kg	5.00		35.00
1,1-DICHLOROETHANE	75-34-3	5		ug/Kg	5.00		35.00
1,1-DICHLOROETHENE	75-35-4	5		ug/Kg	5.00		35.00
1,2,4-TRICHLOROBENZENE	120-82-1	5		ug/Kg	5.00		35.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5		ug/Kg	5.00		35.00
1,2-DIBROMOETHANE	106-93-4	5		ug/Kg	5.00		35.00
1,2-DICHLOROBENZENE	95-50-1	5		ug/Kg	5.00		35.00
1,2-DICHLOROETHANE	107-06-2	5		ug/Kg	5.00		35.00
1,2-DICHLOROPROPANE	78-87-5	5		ug/Kg	5.00		35.00
1,3-DICHLOROBENZENE	541-73-1	5		ug/Kg	5.00		35.00
1,4-DICHLOROBENZENE	106-46-7	5		ug/Kg	5.00		35.00
2-BUTANONE	78-93-3	5		ug/Kg	5.00		35.00
ACETONE	67-64-1	5		ug/Kg	10.00		35.00
ACROLEIN	107-02-8	25		ug/Kg	5.00		35.00
ACRYLONITRILE	107-13-1	5		ug/Kg	5.00		35.00
BENZENE	71-43-2	5		ug/Kg	5.00		35.00
BROMODICHLOROMETHANE	75-27-4	5		ug/Kg	5.00		35.00
BROMOFORM	75-25-2	5		ug/Kg	5.00		35.00
BROMOMETHANE	74-83-9	5		ug/Kg	5.00		35.00
CARBON DISULFIDE	75-15-0	5		ug/Kg	5.00		35.00
CARBON TETRACHLORIDE	56-23-5	5		ug/Kg	5.00		35.00
CHLOROBENZENE	108-90-7	5		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8260B Matrix: SO							
CHLOROETHANE	75-00-3	5		ug/Kg	5.00		35.00
CHLOROFORM	67-66-3	5		ug/Kg	5.00		35.00
CHLOROMETHANE	74-87-3	5		ug/Kg	5.00		35.00
CIS-1,2-DICHLOROETHENE	156-59-2	5		ug/Kg	5.00		35.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	5		ug/Kg	5.00		35.00
DIBROMOCHLOROMETHANE	124-48-1	5		ug/Kg	5.00		35.00
DICHLORODIFLUOROMETHANE	75-71-8	5		ug/Kg	5.00		35.00
ETHYLBENZENE	100-41-4	5		ug/Kg	5.00		35.00
METHYL ACETATE	79-20-9	5		ug/Kg	5.00		35.00
METHYLENE CHLORIDE	75-09-2	5		ug/Kg	10.00		35.00
methyl-t-butyl ether	1634-04-4	5		ug/Kg	5.00		35.00
STYRENE	100-42-5	5		ug/Kg	5.00		35.00
TERT-BUTYL ALCOHOL	75-65-0	10		ug/Kg	5.00		35.00
TETRACHLOROETHENE	127-18-4	5		ug/Kg	5.00		35.00
TOLUENE	108-88-3	5		ug/Kg	5.00		35.00
TRANS-1,2-DICHLOROETHENE	156-60-5	5		ug/Kg	5.00		35.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	5		ug/Kg	5.00		35.00
TRICHLOROETHENE	79-01-6	5		ug/Kg	5.00		35.00
TRICHLOROFLUOROMETHANE	75-69-4	5		ug/Kg	5.00		35.00
VINYL CHLORIDE	75-01-4	5		ug/Kg	5.00		35.00
Xylene (Total)	1330-20-7	5		ug/Kg	5.00		35.00
Method: 8260B-TCLP Matrix: SO							
1,1-DICHLOROETHENE	75-35-4	5		ug/L	5.00	40.00	40.00
1,2-DICHLOROETHANE	107-06-2	5		ug/L	5.00	40.00	40.00
2-BUTANONE	78-93-3	5		ug/L	10.00	40.00	40.00
BENZENE	71-43-2	5		ug/L	5.00	40.00	40.00
CARBON TETRACHLORIDE	56-23-5	5		ug/L	5.00	40.00	40.00
CHLOROBENZENE	108-90-7	5		ug/L	5.00	40.00	40.00
CHLOROFORM	67-66-3	5		ug/L	5.00	40.00	40.00
TETRACHLOROETHENE	127-18-4	5		ug/L	5.00	40.00	40.00
TRICHLOROETHENE	79-01-6	5		ug/L	5.00	40.00	40.00
VINYL CHLORIDE	75-01-4	5		ug/L	5.00	40.00	40.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C **Matrix: SO**							
1,1'-Biphenyl	92-52-4	330		ug/Kg	5.00		35.00
2,4,5-TRICHLOROPHENOL	95-95-4	670		ug/Kg	5.00		35.00
2,4,6-TRICHLOROPHENOL	88-06-2	330		ug/Kg	5.00		35.00
2,4-DICHLOROPHENOL	120-83-2	330		ug/Kg	5.00		35.00
2,4-DIMETHYLPHENOL	105-67-9	330		ug/Kg	5.00		35.00
2,4-DINITROPHENOL	51-28-5	670		ug/Kg	5.00		35.00
2,4-DINITROTOLUENE	121-14-2	330		ug/Kg	5.00		35.00
2,6-DINITROTOLUENE	606-20-2	330		ug/Kg	5.00		35.00
2-CHLOROPHENOL	95-57-8	330		ug/Kg	5.00		35.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	670		ug/Kg	5.00		35.00
2-METHYLNAPHTHALENE	91-57-6	330		ug/Kg	5.00		35.00
2-METHYLPHENOL	95-48-7	330		ug/Kg	5.00		35.00
2-NITROANILINE	88-74-4	670		ug/Kg	5.00		35.00
3,3'-DICHLOROBENZIDINE	91-94-1	330		ug/Kg	5.00		35.00
4-METHYLPHENOL	106-44-5	330		ug/Kg	5.00		35.00
ACENAPHTHENE	83-32-9	330		ug/Kg	5.00		35.00
ACENAPHTHYLENE	208-96-8	330		ug/Kg	5.00		35.00
ACETOPHENONE	98-86-2	330		ug/Kg	5.00		35.00
ANTHRACENE	120-12-7	330		ug/Kg	5.00		35.00
ATRAZINE	1912-24-9	330		ug/Kg	5.00		35.00
Azobenzene	103-33-3	330		ug/Kg	5.00		35.00
BENZALDEHYDE	100-52-7	330		ug/Kg	5.00		35.00
BENZIDINE	92-87-5	330		ug/Kg	5.00		35.00
BENZO(A)ANTHRACENE	56-55-3	330		ug/Kg	5.00		35.00
BENZO(A)PYRENE	50-32-8	330		ug/Kg	5.00		35.00
BENZO(B)FLUORANTHENE	205-99-2	330		ug/Kg	5.00		35.00
BENZO(G,H,I)PERYLENE	191-24-2	330		ug/Kg	5.00		35.00
BENZO(K)FLUORANTHENE	207-08-9	330		ug/Kg	5.00		35.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	330		ug/Kg	5.00		35.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	330		ug/Kg	5.00		35.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	330		ug/Kg	5.00		35.00
BUTYLBENZYL PHTHALATE	85-68-7	330		ug/Kg	5.00		35.00
CAPROLACTAM	105-60-2	330		ug/Kg	5.00		35.00

Target Analyte Name	Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C **Matrix: SO**							
CARBAZOLE	86-74-8	330		ug/Kg	5.00		35.00
CHRYSENE	218-01-9	330		ug/Kg	5.00		35.00
DIBENZ(A,H)ANTHRACENE	53-70-3	330		ug/Kg	5.00		35.00
DIETHYL PHTHALATE	84-66-2	330		ug/Kg	5.00		35.00
DI-N-BUTYL PHTHALATE	84-74-2	330		ug/Kg	5.00		35.00
DI-N-OCTYL PHTHALATE	117-84-0	330		ug/Kg	5.00		35.00
FLUORANTHENE	206-44-0	330		ug/Kg	5.00		35.00
FLUORENE	86-73-7	330		ug/Kg	5.00		35.00
HEXACHLOROBENZENE	118-74-1	330		ug/Kg	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	330		ug/Kg	5.00		35.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	330		ug/Kg	5.00		35.00
HEXACHLOROETHANE	67-72-1	330		ug/Kg	5.00		35.00
INDENO(1,2,3-CD)PYRENE	193-39-5	330		ug/Kg	5.00		35.00
ISOPHORONE	78-59-1	330		ug/Kg	5.00		35.00
NAPHTHALENE	91-20-3	330		ug/Kg	5.00		35.00
NITROBENZENE	98-95-3	330		ug/Kg	5.00		35.00
N-NITROSODIMETHYLAMINE	62-75-9	330		ug/Kg	5.00		35.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	330		ug/Kg	5.00		35.00
N-NITROSODIPHENYLAMINE	86-30-6	330		ug/Kg	5.00		35.00
PENTACHLOROPHENOL	87-86-5	670		ug/Kg	5.00		35.00
PHENANTHRENE	85-01-8	330		ug/Kg	5.00		35.00
PHENOL	108-95-2	330		ug/Kg	5.00		35.00
PYRENE	129-00-0	330		ug/Kg	5.00		35.00
Method: 8270C-TCLP **Matrix: SO**							
1,4-DICHLOROBENZENE	106-46-7	33		ug/L	5.00		35.00
2,4,5-TRICHLOROPHENOL	95-95-4	66		ug/L	5.00		35.00
2,4,6-TRICHLOROPHENOL	88-06-2	33		ug/L	5.00		35.00
2,4-DINITROTOLUENE	121-14-2	33		ug/L	5.00		35.00
2-METHYLPHENOL	95-48-7	33		ug/L	5.00		35.00
3&4-Methylphenol	106-44-5	33		ug/L	5.00		35.00
HEXACHLOROBENZENE	118-74-1	33		ug/L	5.00		35.00
HEXACHLOROBUTADIENE	87-68-3	33		ug/L	5.00		35.00

Target Analyte Name		Analyte Label (CAS)	Quantitation Limit	Detection Limit	Units	Blank Contamination Rule	LabDup RPD	FieldDup RPD
Method: 8270C-TCLP	**Matrix:** SO							
HEXACHLOROETHANE		67-72-1	33		ug/L	5.00		35.00
NITROBENZENE		98-95-3	33		ug/L	5.00		35.00
PENTACHLOROPHENOL		87-86-5	66		ug/L	5.00		35.00
PYRIDINE		110-86-1	33		ug/L	5.00		35.00
Method: 9012	**Matrix:** SO							
CYANIDE		57-12-5	1.0		mg/Kg	5.00	20.00	35.00
Method: 9045	**Matrix:** SO							
pH		ADR-04-001	1		pH	5.00	20.00	35.00
Method: DOE 4.5.2.3	**Matrix:** SO							
Ac-228		14331-83-0	0.1		pCi/g	5.00	3.92	50.00
Bi-212		14913-49-6	0.1		pCi/g	5.00	3.92	50.00
Bi-214		14733-03-0	0.1		pCi/g	5.00	3.92	50.00
K-40		13966-00-2	0.1		pCi/g	5.00	3.92	50.00
Pa-234m		15100-28-4	0.1		pCi/g	5.00	3.92	50.00
Pb-212		15092-94-1	0.1		pCi/g	5.00	3.92	50.00
Pb-214		15067-28-4	0.1		pCi/g	5.00	3.92	50.00
Ra-226		13982-63-3	0.1		pCi/g	5.00	3.92	50.00
Ra-228		15262-20-1	0.1		pCi/g	5.00	3.92	50.00
Th-234		15065-10-8	0.1		pCi/g	5.00	3.92	50.00
Thorium-232		7440-29-1	0.1		pCi/g	5.00	3.92	50.00
Tl-208		14913-50-9	0.1		pCi/g	5.00	3.92	50.00
U-235		15117-96-1	0.1		pCi/g	5.00	3.92	50.00
Method: EPA 1010	**Matrix:** SO							
IGNITABILITY		10-36-6	200		deg F	5.00	25.00	25.00
Method: SM 4500-H+ B	**Matrix:** AQ							
pH		ADR-04-001	1		pH	5.00	20.00	50.00
Method: SW846_7.3.1	**Matrix:** SO							
Reactive Cyanide		57-12-5	1		mg/kg	5.00	20.00	50.00
Method: SW846_7.3.2	**Matrix:** SO							
Reactive Sulfide		18496-25-8	1		mg/kg	5.00	20.00	50.00

Project Accuracy and Precision Report

eQapp Name: Cornell_OU1_Spectrum (090612)
Description: Cornell_OU1_Spectrum (revised 090612)

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 6010B	**Matrix:** SO					
QC Type: LCS						
ALUMINUM	7429-90-5	10.00	80.00	120.00		
ANTIMONY	7440-36-0	10.00	80.00	120.00		
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
BERYLLIUM	7440-41-7	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
COBALT	7440-48-4	10.00	80.00	120.00		
COPPER	7440-50-8	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
MANGANESE	7439-96-5	10.00	80.00	120.00		
NICKEL	7440-02-0	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	75.00	120.00		
THALLIUM	7440-28-0	10.00	80.00	120.00		
VANADIUM	7440-62-2	10.00	80.00	120.00		
ZINC	7440-66-6	10.00	80.00	120.00		
QC Type: MS						
ALUMINUM	7429-90-5	10.00	75.00	125.00		
ANTIMONY	7440-36-0	10.00	75.00	125.00		
ARSENIC	7440-38-2	10.00	75.00	125.00		
BARIUM	7440-39-3	10.00	75.00	125.00		
BERYLLIUM	7440-41-7	10.00	75.00	125.00		
CADMIUM	7440-43-9	10.00	75.00	125.00		
CHROMIUM	7440-47-3	10.00	75.00	125.00		
COBALT	7440-48-4	10.00	75.00	125.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 6010B	**Matrix:** SO					
QC Type: MS						
COPPER	7440-50-8	10.00	75.00	125.00		
LEAD	7439-92-1	10.00	75.00	125.00		
MANGANESE	7439-96-5	10.00	75.00	125.00		
NICKEL	7440-02-0	10.00	75.00	125.00		
SELENIUM	7782-49-2	10.00	75.00	125.00		
SILVER	7440-22-4	10.00	75.00	125.00		
THALLIUM	7440-28-0	10.00	75.00	125.00		
VANADIUM	7440-62-2	10.00	75.00	125.00		
ZINC	7440-66-6	10.00	75.00	125.00		
Method: 6010B-TCLP	**Matrix:** SO					
QC Type: LCS						
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	80.00	120.00		
QC Type: MS						
ARSENIC	7440-38-2	10.00	80.00	120.00		
BARIUM	7440-39-3	10.00	80.00	120.00		
CADMIUM	7440-43-9	10.00	80.00	120.00		
CHROMIUM	7440-47-3	10.00	80.00	120.00		
LEAD	7439-92-1	10.00	80.00	120.00		
SELENIUM	7782-49-2	10.00	80.00	120.00		
SILVER	7440-22-4	10.00	80.00	120.00		

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 7470A-TCLP **Matrix:** SO						
QC Type: LCS						
MERCURY	7439-97-6	10.00	80.00	120.00		
QC Type: MS						
MERCURY	7439-97-6	10.00	80.00	120.00		
Method: 7471A **Matrix:** SO						
QC Type: LCS						
MERCURY	7439-97-6	10.00	80.00	120.00		
QC Type: MS						
MERCURY	7439-97-6	10.00	80.00	120.00		
Method: 8081A **Matrix:** SO						
QC Type: LCS						
4,4'-DDD	72-54-8	10.00	30.00	135.00		30.00
4,4'-DDE	72-55-9	10.00	70.00	125.00		30.00
4,4'-DDT	50-29-3	10.00	45.00	140.00		30.00
ALDRIN	309-00-2	10.00	45.00	140.00		30.00
ALPHA-BHC	319-84-6	10.00	60.00	125.00		30.00
ALPHA-CHLORDANE	5103-71-9	10.00	65.00	120.00		30.00
BETA-BHC	319-85-7	10.00	60.00	125.00		30.00
DIELDRIN	60-57-1	10.00	65.00	125.00		30.00
ENDOSULFAN I	959-98-8	10.00	15.00	135.00		30.00
ENDOSULFAN II	33213-65-9	10.00	35.00	140.00		30.00
ENDOSULFAN SULFATE	1031-07-8	10.00	60.00	135.00		30.00
ENDRIN	72-20-8	10.00	60.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	60.00	125.00		30.00
GAMMA-CHLORDANE	5103-74-2	10.00	65.00	125.00		30.00
HEPTACHLOR	76-44-8	10.00	50.00	140.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	65.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	145.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A **Matrix:** SO						
QC Type: MS						
4,4'-DDD	72-54-8	10.00	30.00	135.00		30.00
4,4'-DDE	72-55-9	10.00	70.00	125.00		30.00
4,4'-DDT	50-29-3	10.00	45.00	140.00		30.00
ALDRIN	309-00-2	10.00	45.00	140.00		30.00
ALPHA-BHC	319-84-6	10.00	60.00	125.00		30.00
ALPHA-CHLORDANE	5103-71-9	10.00	65.00	120.00		30.00
BETA-BHC	319-85-7	10.00	60.00	125.00		30.00
DIELDRIN	60-57-1	10.00	65.00	125.00		30.00
ENDOSULFAN I	959-98-8	10.00	15.00	135.00		30.00
ENDOSULFAN II	33213-65-9	10.00	35.00	140.00		30.00
ENDOSULFAN SULFATE	1031-07-8	10.00	60.00	135.00		30.00
ENDRIN	72-20-8	10.00	60.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	60.00	125.00		30.00
GAMMA-CHLORDANE	5103-74-2	10.00	65.00	120.00		30.00
HEPTACHLOR	76-44-8	10.00	50.00	140.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	65.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	145.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	55.00	130.00		
Tetrachloro-meta-xylene	877-09-8	10.00	14.00	113.00		
Method: 8081A-TCLP **Matrix:** SO						
QC Type: LCS						
ENDRIN	72-20-8	10.00	55.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	25.00	135.00		30.00
HEPTACHLOR	76-44-8	10.00	40.00	130.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	60.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	150.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8081A-TCLP **Matrix:** SO						
QC Type: MS						
ENDRIN	72-20-8	10.00	55.00	135.00		30.00
GAMMA-BHC	58-89-9	10.00	25.00	135.00		30.00
HEPTACHLOR	76-44-8	10.00	40.00	130.00		30.00
HEPTACHLOR EPOXIDE	1024-57-3	10.00	60.00	130.00		30.00
METHOXYCHLOR	72-43-5	10.00	55.00	150.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	40.00	135.00		
TETRACHLORO-M-XYLENE	877-09-8	10.00	32.00	89.00		
Method: 8082 **Matrix:** SO						
QC Type: LCS						
AROCLOR 1016	12674-11-2	10.00	40.00	140.00		30.00
AROCLOR 1260	11096-82-5	10.00	60.00	130.00		30.00
QC Type: MS						
AROCLOR 1016	12674-11-2	10.00	40.00	140.00		30.00
AROCLOR 1260	11096-82-5	10.00	60.00	130.00		30.00
QC Type: SURR						
DECACHLOROBIPHENYL	2051-24-3	10.00	60.00	125.00		
TETRACHLORO-M-XYLENE	877-09-8	10.00	27.00	120.00		
Method: 8151A-TCLP **Matrix:** SO						
QC Type: LCS						
2,4,5-TP	93-72-1	10.00	36.00	136.00		30.00
2,4-D	94-75-7	10.00	24.00	133.00		30.00
QC Type: MS						
2,4,5-TP	93-72-1	10.00	36.00	136.00		30.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8151A-TCLP	**Matrix: SO**					
QC Type: MS						
2,4-D	94-75-7	10.00	24.00	133.00		30.00
QC Type: SURR						
2,4-DCPAA	19719-28-9	10.00	10.00	105.00		
Method: 8260B	**Matrix: SO**					
QC Type: LCS						
1,1,1-TRICHLOROETHANE	71-55-6	10.00	70.00	135.00		40.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.00	55.00	130.00		40.00
1,1,2-TRICHLOROETHANE	79-00-5	10.00	60.00	125.00		40.00
1,1-DICHLOROETHANE	75-34-3	10.00	75.00	125.00		40.00
1,1-DICHLOROETHENE	75-35-4	10.00	65.00	135.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	65.00	130.00		40.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	10.00	40.00	135.00		40.00
1,2-DIBROMOETHANE	106-93-4	10.00	70.00	125.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	75.00	120.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	135.00		40.00
1,2-DICHLOROPROPANE	78-87-5	10.00	70.00	120.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	70.00	125.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	70.00	125.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	160.00		40.00
ACETONE	67-64-1	10.00	20.00	160.00		40.00
ACROLEIN	107-02-8	10.00	70.00	130.00		40.00
ACRYLONITRILE	107-13-1	10.00	70.00	130.00		40.00
BENZENE	71-43-2	10.00	75.00	125.00		40.00
BROMODICHLOROMETHANE	75-27-4	10.00	70.00	130.00		40.00
BROMOFORM	75-25-2	10.00	55.00	135.00		40.00
BROMOMETHANE	74-83-9	10.00	30.00	160.00		40.00
CARBON DISULFIDE	75-15-0	10.00	45.00	160.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	135.00		40.00
CHLOROBENZENE	108-90-7	10.00	75.00	125.00		40.00
CHLOROETHANE	75-00-3	10.00	40.00	155.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix:** SO					
QC Type: LCS						
CHLOROFORM	67-66-3	10.00	70.00	125.00		40.00
CHLOROMETHANE	74-87-3	10.00	50.00	130.00		40.00
CIS-1,2-DICHLOROETHENE	156-59-2	10.00	65.00	125.00		40.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.00	70.00	125.00		40.00
DIBROMOCHLOROMETHANE	124-48-1	10.00	65.00	130.00		40.00
DICHLORODIFLUOROMETHANE	75-71-8	10.00	35.00	135.00		40.00
ETHYLBENZENE	100-41-4	10.00	75.00	125.00		40.00
METHYL ACETATE	79-20-9	10.00	70.00	130.00		40.00
METHYLENE CHLORIDE	75-09-2	10.00	55.00	140.00		40.00
methyl-t-butyl ether	1634-04-4	10.00	75.00	126.00		40.00
STYRENE	100-42-5	10.00	75.00	125.00		40.00
TERT-BUTYL ALCOHOL	75-65-0	10.00	50.00	130.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	65.00	140.00		40.00
TOLUENE	108-88-3	10.00	70.00	125.00		40.00
TRANS-1,2-DICHLOROETHENE	156-60-5	10.00	65.00	135.00		40.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.00	65.00	125.00		40.00
TRICHLOROETHENE	79-01-6	10.00	75.00	125.00		40.00
TRICHLOROFLUOROMETHANE	75-69-4	10.00	25.00	185.00		40.00
VINYL CHLORIDE	75-01-4	10.00	60.00	125.00		40.00
Xylene (Total)	1330-20-7	10.00	83.00	125.00		40.00
QC Type: MS						
1,1,1-TRICHLOROETHANE	71-55-6	10.00	70.00	135.00		40.00
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.00	55.00	130.00		40.00
1,1,2-TRICHLOROETHANE	79-00-5	10.00	60.00	125.00		40.00
1,1-DICHLOROETHANE	75-34-3	10.00	75.00	125.00		40.00
1,1-DICHLOROETHENE	75-35-4	10.00	65.00	135.00		40.00
1,2,4-TRICHLOROBENZENE	120-82-1	10.00	65.00	130.00		40.00
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	10.00	40.00	135.00		40.00
1,2-DIBROMOETHANE	106-93-4	10.00	70.00	125.00		40.00
1,2-DICHLOROBENZENE	95-50-1	10.00	75.00	120.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	135.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix:** SO					
QC Type: MS						
1,2-DICHLOROPROPANE	78-87-5	10.00	70.00	120.00		40.00
1,3-DICHLOROBENZENE	541-73-1	10.00	70.00	125.00		40.00
1,4-DICHLOROBENZENE	106-46-7	10.00	70.00	125.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	160.00		40.00
ACETONE	67-64-1	10.00	20.00	160.00		40.00
ACROLEIN	107-02-8	10.00	70.00	130.00		40.00
ACRYLONITRILE	107-13-1	10.00	70.00	130.00		40.00
BENZENE	71-43-2	10.00	75.00	125.00		40.00
BROMODICHLOROMETHANE	75-27-4	10.00	70.00	130.00		40.00
BROMOFORM	75-25-2	10.00	55.00	135.00		40.00
BROMOMETHANE	74-83-9	10.00	30.00	160.00		40.00
CARBON DISULFIDE	75-15-0	10.00	45.00	160.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	135.00		40.00
CHLOROBENZENE	108-90-7	10.00	75.00	125.00		40.00
CHLOROETHANE	75-00-3	10.00	40.00	155.00		40.00
CHLOROFORM	67-66-3	10.00	70.00	125.00		40.00
CHLOROMETHANE	74-87-3	10.00	50.00	130.00		40.00
CIS-1,2-DICHLOROETHENE	156-59-2	10.00	65.00	125.00		40.00
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.00	70.00	125.00		40.00
DIBROMOCHLOROMETHANE	124-48-1	10.00	65.00	130.00		40.00
DICHLORODIFLUOROMETHANE	75-71-8	10.00	35.00	135.00		40.00
ETHYLBENZENE	100-41-4	10.00	75.00	125.00		40.00
METHYL ACETATE	79-20-9	10.00	70.00	130.00		40.00
METHYLENE CHLORIDE	75-09-2	10.00	55.00	140.00		40.00
methyl-t-butyl ether	1634-04-4	10.00	75.00	126.00		40.00
STYRENE	100-42-5	10.00	75.00	125.00		40.00
TERT-BUTYL ALCOHOL	75-65-0	10.00	50.00	130.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	65.00	140.00		40.00
TOLUENE	108-88-3	10.00	70.00	125.00		40.00
TRANS-1,2-DICHLOROETHENE	156-60-5	10.00	65.00	135.00		40.00
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.00	65.00	125.00		40.00
TRICHLOROETHENE	79-01-6	10.00	75.00	125.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B	**Matrix:** SO					
QC Type: MS						
TRICHLOROFLUOROMETHANE	75-69-4	10.00	25.00	185.00		40.00
VINYL CHLORIDE	75-01-4	10.00	60.00	125.00		40.00
Xylene (Total)	1330-20-7	10.00	83.00	125.00		40.00
QC Type: SURR						
1,2-DICHLOROETHANE-D4	17060-07-0	10.00	65.00	128.00		
BROMOFLUOROBENZENE	30135-88-7	10.00	77.00	111.00		
DIBROMOFLUOROMETHANE	1868-53-7	10.00	65.00	132.00		
TOLUENE-D8	2037-26-5	10.00	85.00	115.00		
Method: 8260B-TCLP	**Matrix:** SO					
QC Type: LCS						
1,1-DICHLOROETHENE	75-35-4	10.00	70.00	130.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	130.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	150.00		40.00
BENZENE	71-43-2	10.00	80.00	120.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	140.00		40.00
CHLOROBENZENE	108-90-7	10.00	80.00	120.00		40.00
CHLOROFORM	67-66-3	10.00	65.00	135.00		40.00
TETRACHLOROETHENE	127-18-4	10.00	45.00	150.00		40.00
TRICHLOROETHENE	79-01-6	10.00	70.00	125.00		40.00
VINYL CHLORIDE	75-01-4	10.00	50.00	145.00		40.00
QC Type: MS						
1,1-DICHLOROETHENE	75-35-4	10.00	70.00	130.00		40.00
1,2-DICHLOROETHANE	107-06-2	10.00	70.00	130.00		40.00
2-BUTANONE	78-93-3	10.00	30.00	150.00		40.00
BENZENE	71-43-2	10.00	80.00	120.00		40.00
CARBON TETRACHLORIDE	56-23-5	10.00	65.00	140.00		40.00
CHLOROBENZENE	108-90-7	10.00	80.00	120.00		40.00
CHLOROFORM	67-66-3	10.00	65.00	135.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8260B-TCLP **Matrix:** SO						
QC Type: MS						
TETRACHLOROETHENE	127-18-4	10.00	45.00	150.00		40.00
TRICHLOROETHENE	79-01-6	10.00	70.00	125.00		40.00
VINYL CHLORIDE	75-01-4	10.00	50.00	145.00		40.00
QC Type: SURR						
1,2-DICHLOROETHANE-D4	17060-07-0	10.00	70.00	120.00		
BROMOFLUOROBENZENE	30135-88-7	10.00	75.00	120.00		
DIBROMOFLUOROMETHANE	1868-53-7	10.00	85.00	115.00		
TOLUENE-D8	2037-26-5	10.00	85.00	120.00		
Method: 8270C **Matrix:** SO						
QC Type: LCS						
1,1'-Biphenyl	92-52-4	10.00	50.00	150.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	45.00	110.00		40.00
2,4-DICHLOROPHENOL	120-83-2	10.00	45.00	110.00		40.00
2,4-DIMETHYLPHENOL	105-67-9	10.00	30.00	105.00		40.00
2,4-DINITROPHENOL	51-28-5	10.00	15.00	130.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	115.00		40.00
2,6-DINITROTOLUENE	606-20-2	10.00	50.00	110.00		40.00
2-CHLOROPHENOL	95-57-8	10.00	45.00	105.00		40.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	10.00	30.00	135.00		40.00
2-METHYLNAPHTHALENE	91-57-6	10.00	45.00	105.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	105.00		40.00
2-NITROANILINE	88-74-4	10.00	45.00	120.00		40.00
3,3'-DICHLOROBENZIDINE	91-94-1	10.00	10.00	130.00		40.00
4-METHYLPHENOL	106-44-5	10.00	50.00	150.00		40.00
ACENAPHTHENE	83-32-9	10.00	45.00	110.00		40.00
ACENAPHTHYLENE	208-96-8	10.00	45.00	105.00		40.00
ACETOPHENONE	98-86-2	10.00	50.00	150.00		40.00
ANTHRACENE	120-12-7	10.00	55.00	105.00		40.00
ATRAZINE	1912-24-9	10.00	50.00	150.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix:** SO					
QC Type: LCS						
Azobenzene	103-33-3	10.00	50.00	150.00		40.00
BENZALDEHYDE	100-52-7	10.00	10.00	118.00		40.00
BENZIDINE	92-87-5	10.00	10.00	150.00		40.00
BENZO(A)ANTHRACENE	56-55-3	10.00	50.00	110.00		40.00
BENZO(A)PYRENE	50-32-8	10.00	50.00	110.00		40.00
BENZO(B)FLUORANTHENE	205-99-2	10.00	45.00	115.00		40.00
BENZO(G,H,I)PERYLENE	191-24-2	10.00	40.00	125.00		40.00
BENZO(K)FLUORANTHENE	207-08-9	10.00	45.00	125.00		40.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	10.00	40.00	105.00		40.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	10.00	20.00	115.00		40.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	10.00	45.00	125.00		40.00
BUTYLBENZYL PHTHALATE	85-68-7	10.00	50.00	125.00		40.00
CAPROLACTAM	105-60-2	10.00	50.00	150.00		40.00
CARBAZOLE	86-74-8	10.00	45.00	115.00		40.00
CHRYSENE	218-01-9	10.00	55.00	110.00		40.00
DIBENZ(A,H)ANTHRACENE	53-70-3	10.00	40.00	125.00		40.00
DIETHYL PHTHALATE	84-66-2	10.00	50.00	115.00		40.00
DI-N-BUTYL PHTHALATE	84-74-2	10.00	55.00	110.00		40.00
DI-N-OCTYL PHTHALATE	117-84-0	10.00	40.00	130.00		40.00
FLUORANTHENE	206-44-0	10.00	55.00	115.00		40.00
FLUORENE	86-73-7	10.00	50.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	45.00	120.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	40.00	115.00		40.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	5.00	8.00	148.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	35.00	110.00		40.00
INDENO(1,2,3-CD)PYRENE	193-39-5	10.00	40.00	120.00		40.00
ISOPHORONE	78-59-1	10.00	45.00	110.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	105.00		40.00
NITROBENZENE	98-95-3	10.00	40.00	115.00		40.00
N-NITROSODIMETHYLAMINE	62-75-9	10.00	50.00	150.00		40.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	10.00	40.00	115.00		40.00
N-NITROSODIPHENYLAMINE	86-30-6	10.00	50.00	115.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: LCS						
PENTACHLOROPHENOL	87-86-5	10.00	25.00	120.00		40.00
PHENANTHRENE	85-01-8	10.00	50.00	110.00		40.00
PHENOL	108-95-2	10.00	40.00	100.00		40.00
PYRENE	129-00-0	10.00	45.00	125.00		40.00
QC Type: MS						
1,1'-Biphenyl	92-52-4	10.00	50.00	150.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	45.00	110.00		40.00
2,4-DICHLOROPHENOL	120-83-2	10.00	45.00	110.00		40.00
2,4-DIMETHYLPHENOL	105-67-9	10.00	30.00	105.00		40.00
2,4-DINITROPHENOL	51-28-5	10.00	15.00	130.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	115.00		40.00
2,6-DINITROTOLUENE	606-20-2	10.00	50.00	110.00		40.00
2-CHLOROPHENOL	95-57-8	10.00	45.00	105.00		40.00
2-METHYL-4,6-DINITROPHENOL	534-52-1	10.00	30.00	135.00		40.00
2-METHYLNAPHTHALENE	91-57-6	10.00	45.00	105.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	105.00		40.00
2-NITROANILINE	88-74-4	10.00	45.00	120.00		40.00
3,3'-DICHLOROBENZIDINE	91-94-1	10.00	10.00	130.00		40.00
4-METHYLPHENOL	106-44-5	10.00	50.00	150.00		40.00
ACENAPHTHENE	83-32-9	10.00	45.00	110.00		40.00
ACENAPHTHYLENE	208-96-8	10.00	45.00	105.00		40.00
ACETOPHENONE	98-86-2	10.00	50.00	150.00		40.00
ANTHRACENE	120-12-7	10.00	55.00	105.00		40.00
ATRAZINE	1912-24-9	10.00	50.00	150.00		40.00
Azobenzene	103-33-3	10.00	50.00	150.00		40.00
BENZALDEHYDE	100-52-7	10.00	10.00	118.00		40.00
BENZIDINE	92-87-5	10.00	10.00	150.00		40.00
BENZO(A)ANTHRACENE	56-55-3	10.00	50.00	110.00		40.00
BENZO(A)PYRENE	50-32-8	10.00	50.00	110.00		40.00
BENZO(B)FLUORANTHENE	205-99-2	10.00	45.00	115.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix:** SO					
QC Type: MS						
BENZO(G,H,I)PERYLENE	191-24-2	10.00	40.00	125.00		40.00
BENZO(K)FLUORANTHENE	207-08-9	10.00	45.00	125.00		40.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	10.00	40.00	105.00		40.00
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	10.00	20.00	115.00		40.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	10.00	45.00	125.00		40.00
BUTYLBENZYL PHTHALATE	85-68-7	10.00	50.00	125.00		40.00
CAPROLACTAM	105-60-2	10.00	50.00	150.00		40.00
CARBAZOLE	86-74-8	10.00	45.00	115.00		40.00
CHRYSENE	218-01-9	10.00	55.00	110.00		40.00
DIBENZ(A,H)ANTHRACENE	53-70-3	10.00	40.00	125.00		40.00
DIETHYL PHTHALATE	84-66-2	10.00	50.00	115.00		40.00
DI-N-BUTYL PHTHALATE	84-74-2	10.00	55.00	110.00		40.00
DI-N-OCTYL PHTHALATE	117-84-0	10.00	40.00	130.00		40.00
FLUORANTHENE	206-44-0	10.00	55.00	115.00		40.00
FLUORENE	86-73-7	10.00	50.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	45.00	120.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	40.00	115.00		40.00
HEXACHLOROCYCLOPENTADIENE	77-47-4	5.00	8.00	148.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	35.00	110.00		40.00
INDENO(1,2,3-CD)PYRENE	193-39-5	10.00	40.00	120.00		40.00
ISOPHORONE	78-59-1	10.00	45.00	110.00		40.00
NAPHTHALENE	91-20-3	10.00	40.00	105.00		40.00
NITROBENZENE	98-95-3	10.00	40.00	115.00		40.00
N-NITROSODIMETHYLAMINE	62-75-9	10.00	50.00	150.00		40.00
N-NITROSO-DI-N-PROPYLAMINE	621-64-7	10.00	40.00	115.00		40.00
N-NITROSODIPHENYLAMINE	86-30-6	10.00	50.00	115.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	25.00	120.00		40.00
PHENANTHRENE	85-01-8	10.00	50.00	110.00		40.00
PHENOL	108-95-2	10.00	40.00	100.00		40.00
PYRENE	129-00-0	10.00	45.00	125.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C	**Matrix: SO**					
QC Type: SURR						
2,4,6-TRIBROMOPHENOL	118-79-6	10.00	35.00	125.00		
2-FLUOROBIPHENYL	321-60-8	10.00	45.00	105.00		
2-FLUOROPHENOL	367-12-4	10.00	35.00	105.00		
NITROBENZENE-D5	20810-28-0	10.00	35.00	100.00		
PHENOL-D5	4165-62-2	10.00	40.00	100.00		
TERPHENYL-D14	98904-43-9	10.00	30.00	125.00		
Method: 8270C-TCLP	**Matrix: SO**					
QC Type: LCS						
1,4-DICHLOROBENZENE	106-46-7	10.00	30.00	100.00		
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	50.00	115.00		
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	120.00		
2-METHYLPHENOL	95-48-7	10.00	40.00	110.00		
3&4-Methylphenol	106-44-5	10.00	30.00	110.00		
HEXACHLOROBENZENE	118-74-1	10.00	50.00	110.00		
HEXACHLOROBUTADIENE	87-68-3	10.00	25.00	105.00		
HEXACHLOROETHANE	67-72-1	10.00	30.00	95.00		
NITROBENZENE	98-95-3	10.00	45.00	110.00		
PENTACHLOROPHENOL	87-86-5	10.00	40.00	115.00		
PYRIDINE	110-86-1	10.00	10.00	106.00		
QC Type: MS						
1,4-DICHLOROBENZENE	106-46-7	10.00	30.00	100.00		40.00
2,4,5-TRICHLOROPHENOL	95-95-4	10.00	50.00	110.00		40.00
2,4,6-TRICHLOROPHENOL	88-06-2	10.00	50.00	115.00		40.00
2,4-DINITROTOLUENE	121-14-2	10.00	50.00	120.00		40.00
2-METHYLPHENOL	95-48-7	10.00	40.00	110.00		40.00
3&4-Methylphenol	106-44-5	10.00	30.00	110.00		40.00
HEXACHLOROBENZENE	118-74-1	10.00	50.00	110.00		40.00
HEXACHLOROBUTADIENE	87-68-3	10.00	25.00	105.00		40.00
HEXACHLOROETHANE	67-72-1	10.00	30.00	95.00		40.00

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: 8270C-TCLP **Matrix:** SO						
QC Type: MS						
NITROBENZENE	98-95-3	10.00	45.00	110.00		40.00
PENTACHLOROPHENOL	87-86-5	10.00	40.00	115.00		40.00
PYRIDINE	110-86-1	10.00	10.00	106.00		40.00
QC Type: SURR						
2,4,6-TRIBROMOPHENOL	118-79-6	10.00	40.00	125.00		
2-FLUOROBIPHENYL	321-60-8	10.00	50.00	110.00		
2-FLUOROPHENOL	367-12-4	10.00	20.00	110.00		
NITROBENZENE-D5	20810-28-0	10.00	40.00	110.00		
PHENOL-D5	4165-62-2	10.00	10.00	115.00		
TERPHENYL-D14	98904-43-9	10.00	50.00	135.00		
Method: 9012 **Matrix:** SO						
QC Type: LCS						
CYANIDE	57-12-5	10.00	80.00	120.00		
QC Type: MS						
CYANIDE	57-12-5	10.00	75.00	125.00		
Method: DOE 4.5.2.3 **Matrix:** SO						
QC Type: LCS						
Ac-228	14331-83-0	104.00	104.00	130.00		3.92
Bi-212	14913-49-6	57.00	57.00	90.00		3.92
Bi-214	14733-03-0	96.00	96.00	120.00		3.92
K-40	13966-00-2	102.00	102.00	118.00		3.92
Pb-212	15092-94-1	107.00	107.00	128.00		3.92
Pb-214	15067-28-4	99.00	99.00	127.00		3.92
Ra-226	13982-63-3	65.00	65.00	106.00		3.92
Ra-228	15262-20-1	104.00	104.00	130.00		3.92
Th-234	15065-10-8	13.00	13.00	370.00		3.92

Analyte Name	Analyte Label (CAS)	Lower Rejection (%)	Lower Recovery (%)	Upper Recovery (%)	Upper Rejection (%)	RPD (%)
Method: EPA 1010 **Matrix:** SO						
QC Type: LCS						
IGNITABILITY	10-36-6	50.00	80.00	120.00		25.00
Method: SW846_7.3.1 **Matrix:** SO						
QC Type: LCS						
Reactive Cyanide	57-12-5	0.00	0.00	12.40		20.00
QC Type: MS						
Reactive Cyanide	57-12-5	0.00	0.00	12.40		20.00
Method: SW846_7.3.2 **Matrix:** SO						
QC Type: LCS						
Reactive Sulfide	18496-25-8	10.00	22.60	114.00		20.00
QC Type: MS						
Reactive Sulfide	18496-25-8	10.00	22.60	114.00		20.00

APPENDIX 5

STANDARD SAMPLE TRACKING AND DOCUMENTATION FORMS, REVIEW FORMS AND CHECKLISTS

SAMPLE IDENTIFICATION LABEL

I-CHEM

CLIENT/SOURCE	☐ GRAB ☐ COMPOSITE OTHER:
SITE NAME	DATE
SAMPLE #	TIME
ANALYSIS	PRESERVATIVE
	COLL. BY

CHAIN-OF-CUSTODY FORM

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME						PARAMETERS									INDUSTRIAL HYGIENE SAMPLE	Y / N
SAMPLERS: *(Signature)*					(Printed)												
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS										REMARKS	

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
(Printed)		(Printed)	(Printed)		(Printed)

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
(Printed)		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Preparatory Phase Checklist

Contract:	Date Preparatory Held:
Spec. Section & Paragraph:	Definable Feature of Work:
Drawing Sheet Numbers:	Major Definable Feature:

A. Personnel Present

Name	Position	Company

B. Has each spec. paragraph, drawing, and shop drawing detail been studied? Yes __ No __

C. Transmittals Involved

Number and Item	Code	Contractor/Government Approval

Have all items involved been approved? Yes _____ No_____

D. Are all materials on-hand? Yes ____ No_____

Are the materials on the job-site to be incorporated the same as those approved?
Yes _____ No _____

Have all materials been checked for contract compliance against approved shop drawings? Yes ____ No _____

Equipment to be used in executing the work:

Items not on-hand or not in compliance with transmittals:

E. Tests required in accordance with contract requirements:

Test	Paragraph

F. Accident Prevention Planning - Hazard Control Measures:

Activity Hazard Analysis

Activity	Hazard(s)	Controls

Operational Equipment Checklist

Attached For:

On File For:

G. Have procedures for accomplishing work been reviewed with appropriate people?

Yes ___ No

Scope of Work/Method of Construction:

Safety Issues:

Spill Prevention Issues:

H. Has all preliminary work been accomplished in accord with contract requirements and is this segment of work ready to start? Yes ___ No

Explain any problems:

I. Remarks:

USACE Comments:

Sevenson Comments:

CQC Systems Manager	Project Engineer

Initial/Follow-Up Phase Inspection Checklist

Inspection Type: ☐ Initial Phase ☐ Follow-Up Phase

Date: _____ Specifications Paragraph: _____

Description and location of work inspected: _____

_____

Reference contract drawings: _____

A. Personnel Present

Name	Position	Company

B. Materials being used are in strict compliance with the Contract Plans and Specifications?
YES _____ NO _____
If not, explain: _____

_____

C. Procedures and/or work methods witnessed are in strict compliance with the requirements of the Contract Specifications? YES _____ NO _____
If not, explain: _____

_____

D. Workmanship is acceptable? YES _____ NO _____
State areas where improvement is needed: _____

_____

E. Safety violations and corrective actions taken: _____

_____

F. Remarks: _____

_____

_____

_____ _____

Quality Control Representative Project Engineer

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: _____

Job Identification and Site Numbers: _____

_____

Weather: _____

_____

Subcontractors Present Onsite: _____

_____

Health and Safety Measures Necessary for Planned Activities: _____

_____

Health and Safety Violations and Corrective Actions: _____

_____

_____

Planned Daily Activities: _____

_____

_____

Description of Chemical Data Acquisition Work Performed: _____

_____

_____

Sample Shipments and Problems Regarding Sampling and Sample Shipments: _____

_____

Chemical Parameter Measurement Problems: _____

_____

_____

Contingency Sampling: _____

_____

_____

Non-conformance Problems: _____

_____

_____

Corrective Actions (including approvals): _____

_____

_____

Initials of Personnel Performing Corrective Actions: _____

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): _____

_____

_____

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

_____ _____

Signature Date

SITE QC INSPECTION REPORT

Project Name _____ Client/Generator _____

Sevenson Job # _____ Contract # _____

Project Location _____ Task Order # _____

Inspection Date _____ Inspection Time _____

Inspected By _____

Sevenson Project Manager _____ Client/Generator Project Manager _____

Site Telephone # _____ Contact Telephone # _____

Site Facsimile # _____ Contact Facsimile # _____

Site Email Address _____

Site Plans/Activities

Construction Management Plan/Work Plan

Original Approval Date _____

Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Current Plan Copy Available Onsite
☐	☐	Spill Response equipment/materials available?
☐	☐	Soil erosion/sediment controls in-place?
☐	☐	Work zones (EZ, CRZ, SZ) clearly delineated?
☐	☐	All equipment inspections being documents (in and out)?

COMMENTS: _____

_____

_____

_____

_____

Health and Safety

Original Plan Approval Date _____
Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Current Plan Copy Available Onsite
☐	☐	Activity Hazard Analysis Complete and Updated
☐	☐	Daily Safety Meetings Conducted and Documented
☐	☐	Emergency Response Information Posted
☐	☐	Medical and Training Documentation Current
☐	☐	Daily Safety Logs Completed
☐	☐	Chemical Inventory Updated
☐	☐	Inspections Completed and Documented
☐	☐	Map to hospital prominently displayed?
☐	☐	Is work being conducted safely?

COMMENTS: _____

_____

_____

Sampling and Analysis

Original Plan Approval Date _____
Revision Approval Date (if applicable) _____

YES	NO	
☐	☐	Is a current plan copy available onsite?
☐	☐	Has a review of the Plan and all relevant SOPs with all site sampling been conducted?
☐	☐	Are field logbooks and other site documentation maintained properly and in a secure area?
☐	☐	Are Preparatory Inspections being conducted prior to each sampling event?
☐	☐	Are Initial and Follow-up Inspections being conducted for each sampling event?
☐	☐	Is the site Sampling Manager performing periodic field audits of all sampling activities?
☐	☐	Is field documentation being reviewed by the site Sampling Manager prior to the completion of each days' sampling events?
☐	☐	Is the Sampling Manager performing field audits of sample labeling, chain-of-custody, packing and shipping activities?
☐	☐	Are Daily Chemical Quality Control Reports (DCQCR) being completed each day and properly?
☐	☐	Are DCQCR, instrument maintenance and calibration, nonconformance/corrective action reports and sampling logs current?

COMMENTS: _____

_____

_____

Project Work Tasks	Sevenson Checklist #
(Check all that apply and attach completed QC Report)	
☐ Monitoring Well Installation, Development, and/or Abandonment	SES 001
☐ Groundwater Monitoring Well Sampling	SES 002
☐ Surface Water Sampling	SES 003
☐ Subsurface Soil Sampling	SES 004
☐ Drum/Tank Sampling	SES 005
☐ Mobile Laboratory	SES 006
☐ Packing, Storing, and Shipment of Samples	SES 007
☐ Field Documentation	SES 008
☐ Decontamination	SES 009
☐ Sample Cooler Shipment	SES 010
☐ Onsite Waste Storage	SES 011
☐ Offsite waste Transport/Disposal	SES 012

COMMENTS: _____

_____

_____

_____

Sevenson Project Manager _____

Name Signature Date

QC Reviewer _____

Name Signature Date

CQC Systems Manager _____

Name Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?				
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?				
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?				
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?				
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?				
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?				
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?				
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?				
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?				
Was a shipping label attached to the cooler?				
Were COCs and shipping tracking labels faxed to lab?				

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?			
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?			
▫ Field Sampling Forms			
▫ Chain of Custody Forms			
▫ Field Log Books			
▫ Field Change Request Forms			
▫ Additional Forms (list below)			
Was field documentation forwarded to Sevenson office for peer/QC review?			
Were deficiencies reported to the Field Sampling Manager?			

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Decontamination
Sevenson Checklist #009

Project Name/Job Number: _____
Inspection Date: _____

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Was all sampling equipment decontaminated properly prior to use and between sample intervals?				
Was each decontamination event recorded in the logbook?				
Was investigation derived waste (IDW) (e.g., decontamination water, personal protective equipment (PPE), etc.) handled properly?				
Were the location, type, number and source of containers of IDW recorded in the logbook?				
Was Sevenson Technical Services notified if IDW requires offsite disposal?				

Notes/Comments

_____
_____
_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: _____

Inspection Date: _____

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☐	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☐	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☐	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☐	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☐	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☐	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☐	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☐	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☐	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☐	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☐	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☐	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☐	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☐	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☐	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☐	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☐	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☐	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☐	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:_____

_____

_____

_____

Sevenson Project Manager_____

Name Signature Date

QC Reviewer _____

Name Signature Date

CQC Systems Manager _____

Name Signature Date

Field Change Request Form

PROJECT MANAGER:_____
PROJECT:_____
JOB NUMBER:_____
CONTRACT NUMBER:_____
DATE:_____
FIELD CHANGE REQUEST NUMBER:_____

Weather

	Bright Sun	Clear	Overcast	Rain	Snow
Temp	To 32	32-50	50-70	70-85	85 up
Wind	Calm	Moderate	High		
Humidity	Dry	Moderate	Humid		

SUB-CONTRACTORS ON SITE:

EQUIPMENT ON SITE:

SAMPLING PERFORMED:

NON-CONFORMANCE/PROBLEM ITEM(S):

PROJECT QA/QC OFFICER NOTIFIED:	TIME	DATE	INITIALS
PROJECT MANAGER NOTIFIED:	TIME	DATE	INITIALS
CONTRACTING OFFICER NOTIFIED:	TIME	DATE	INITIALS
PROJECT TECHNICAL DIRECTOR NOTIFIED:	TIME	DATE	INITIALS

WORK STOPPED? _____ YES _____ NO

IF NOT, EXPLAIN

Sheet _____ of _____

PROJECT _____ REPORT NO. _____

JOB NO. _____ DATE _____

ACTION TO BE TAKEN:

HEALTH AND SAFETY LEVEL CHANGES: _____No _____ Yes (explain)

HSO NAME/DATE:

PROBLEM RESOLUTION:

SPECIAL NOTES:

FOLLOW-UP TO BE FILED? _____ No _____ Yes (explain/attach)

FIELD CHANGE APPROVED: _____ No _____ Yes Initials: _____

Sheet _____ of _____

BY: _____ TITLE:

NON-CONFORMANCE/QUALITY CONTROL REPORT

Date: _____

Organization Name: _____

Initiator's Name and Title: _____

Problem Description:

_____
_____
_____
_____
_____
_____
_____

Reported To: _____

Corrective Action:

_____
_____
_____
_____
_____
_____
_____

Reviewed and Implemented by: _____

APPENDIX 6

LABORATORY STANDARD OPERATING PROCEDURES

(Provided on CD only; hard copies available upon request)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 10/22/2012

TRANSMITTAL NO.: 01450A-16.3

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
3	QAPP Rev 2 with Addendum Rev 1 (Rev 3)	PRECON SUBMTL	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

QUALITY ASSURANCE PROJECT PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
OPERABLE UNIT 1 – SOIL REMEDIATION
SOUTH PLAINFIELD, NEW JERSEY

Prepared by:
Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, New York 14305

Based on the Intergovernmental Data Quality Task Force
Uniform Federal Policy for Quality Assurance Project Plans
(Final Version 1, March 2005)

Revision 2: October 10, 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 08/09/2012	TRANSMITTAL NO. 01450A-51

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO:	FROM:	CONTRACT NO.	CHECK ONE:
Environmental Residency US Army Corps of Engineers 214 State Highway 18 East Brunswick, NJ 08816	Sevenson Environmental Services 2749 Lockport Road Niagara Falls, NY 14305	W912DQ-10-D-3006 0002	[X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION	CHECK ONE: THIS TRANSMITTAL IS
01450A	01-Main Register Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080	FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
3	Waste Determination - 140 Harvard St	TEST REPORTS	2	1.4		A	N	

REMARKS
Disposal Facility - Gloucester County Improvement Authority
Waste Clasification - Non-Hazardous

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

[signature] Lou Zambrana
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) 140 Harvard Street Property (Areas 2-5)**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **08/8/12**

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility – Gloucester County Improvement Authority
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

SUMMARY!

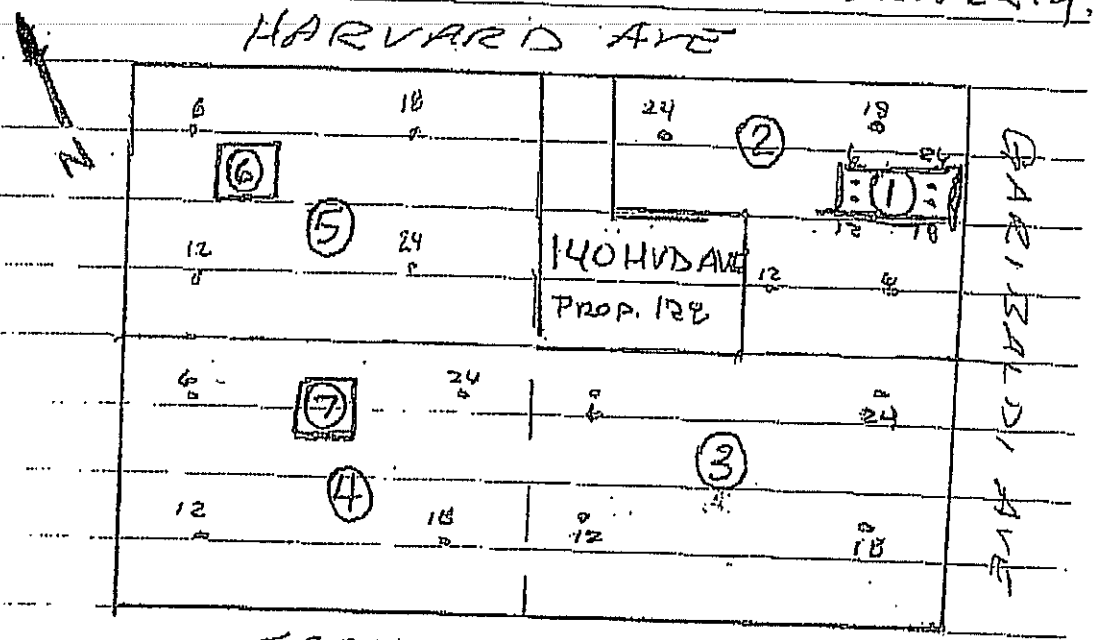
7/18/12 (7)

140 HARVARD AVE

1330 ~~1400~~ PARTLY CLOUDY, HUMID 96°F.

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ. 07080. (PROPERTY 128).

INFORMED HOME OWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 1500 ~~7/18/12 1515~~	~~CD-WC-140HVD-01-001~~
2	7/24/12 1550 ~~7/18/12 1650~~	CD-WC-140HVD-02-002
3	7/24/12 1330 ~~7/23/12 1430~~	CD-WC-140HVD-03-003
4	7/24/12 1400 ~~7/23/12 1600~~	CD-WC-140HVD-04-004
5	7/24/12 1430 ~~0945~~	CD-WC-140HVD-05-005
~~6~~	~~7/24/12 0950~~	~~CD-WC-140HVD-06-006~~
~~7~~	~~7/24/12 1010~~	~~CD-WC-140HVD-07-007~~

WEATHER: VERY WARM - 96-98°F.

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02

Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	07/31/2012 11:00	R68773
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	07/31/2012 15:22	67483
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	07/31/2012 15:52	67484
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.8		1.0	S.U.	1	07/31/2012 15:16	R68778

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02

Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	ND		20	ug/L	1	08/01/2012 11:57	67475
Barium -- TCLP	430		200	ug/L	1	08/01/2012 11:57	67475
Cadmium -- TCLP	ND		5.0	ug/L	1	08/01/2012 11:57	67475
Chromium -- TCLP	0.69	J	20	ug/L	1	08/01/2012 11:57	67475
Lead -- TCLP	ND		10	ug/L	1	08/01/2012 11:57	67475
Selenium -- TCLP	ND		30	ug/L	1	08/01/2012 11:57	67475
Silver -- TCLP	ND		30	ug/L	1	08/01/2012 11:57	67475
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	08/01/2012 11:12	67476

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02

Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
2-Butanone -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
Chloroform -- TCLP	1.3	BJ	5.0	ug/L	1	08/01/2012 20:20	67490
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
Benzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
Trichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:20	67490
Surrogate: Dibromofluoromethane -- TCLP	101		85-115	%REC	1	08/01/2012 20:20	67490
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	110		70-120	%REC	1	08/01/2012 20:20	67490
Surrogate: Toluene-d8 -- TCLP	99.7		85-120	%REC	1	08/01/2012 20:20	67490
Surrogate: Bromofluorobenzene -- TCLP	100		75-120	%REC	1	08/01/2012 20:20	67490

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 20:35	67473
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 20:35	67473
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 20:35	67473
Pyridine -- TCLP	ND		67	ug/L	1	07/31/2012 20:35	67473
Surrogate: Nitrobenzene-d5 -- TCLP	61.3		40-110	%REC	1	07/31/2012 20:35	67473
Surrogate: 2-Fluorobiphenyl -- TCLP	63.0		50-110	%REC	1	07/31/2012 20:35	67473
Surrogate: Terphenyl-d14 -- TCLP	77.3		50-135	%REC	1	07/31/2012 20:35	67473
Surrogate: Phenol-d5 -- TCLP	38.6		10-115	%REC	1	07/31/2012 20:35	67473
Surrogate: 2-Fluorophenol -- TCLP	46.0		20-110	%REC	1	07/31/2012 20:35	67473
Surrogate: 2,4,6-Tribromophenol -- TCLP	80.8		40-125	%REC	1	07/31/2012 20:35	67473

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:07	67471
Heptachlor -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:07	67471
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:07	67471
Endrin -- TCLP	ND		0.33	ug/L	1	08/01/2012 13:07	67471
Methoxychlor -- TCLP	ND		1.7	ug/L	1	08/01/2012 13:07	67471
Toxaphene -- TCLP	ND		17	ug/L	1	08/01/2012 13:07	67471
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	08/01/2012 13:07	67471
Surrogate: Tetrachloro-m-xylene -- TCLP	71.5		25-140	%REC	1	08/01/2012 13:07	67471
Surrogate: Decachlorobiphenyl -- TCLP	77.5		30-135	%REC	1	08/01/2012 13:07	67471

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8151A -- Chlorinated Herbicides by GC-ECD							**SW8151_W**
2,4-D -- TCLP	ND		3.3	µg/L	1	08/01/2012 17:17	67472
2,4,5-TP (Silvex) -- TCLP	ND		0.33	µg/L	1	08/01/2012 17:17	67472
Surrogate: DCAA -- TCLP	55.3		23-139	%REC	1	08/01/2012 17:17	67472

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-02-002
Lab ID: L1640-02

Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 15:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		360	ug/Kg	10	07/31/2012 12:05	67437
Aroclor-1221	ND		360	ug/Kg	10	07/31/2012 12:05	67437
Aroclor-1232	ND		360	ug/Kg	10	07/31/2012 12:05	67437
Aroclor-1242	ND		360	ug/Kg	10	07/31/2012 12:05	67437
Aroclor-1248	ND		360	ug/Kg	10	07/31/2012 12:05	67437
Aroclor-1254	1200		360	ug/Kg	10	07/31/2012 12:05	67437
Aroclor-1260	1900		360	ug/Kg	10	07/31/2012 12:05	67437
Surrogate: Tetrachloro-m-xylene	68.5		34-147	%REC	10	07/31/2012 12:05	67437
Surrogate: Decachlorobiphenyl	102		60-125	%REC	10	07/31/2012 12:05	67437

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

This Page Intentionally Blank

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	07/31/2012 11:30	R68773
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	07/31/2012 15:24	67483
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	07/31/2012 15:53	67484
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.4		1.0	S.U.	1	07/31/2012 15:18	R68778

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	ND		20	ug/L	1	08/01/2012 12:00	67475
Barium -- TCLP	620		200	ug/L	1	08/01/2012 12:00	67475
Cadmium -- TCLP	0.91	J	5.0	ug/L	1	08/01/2012 12:00	67475
Chromium -- TCLP	ND		20	ug/L	1	08/01/2012 12:00	67475
Lead -- TCLP	120		10	ug/L	1	08/01/2012 12:00	67475
Selenium -- TCLP	ND		30	ug/L	1	08/01/2012 12:00	67475
Silver -- TCLP	ND		30	ug/L	1	08/01/2012 12:00	67475
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	08/01/2012 11:14	67476

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03

Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
2-Butanone -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
Chloroform -- TCLP	1.3	BJ	5.0	ug/L	1	08/01/2012 20:52	67490
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
Benzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
Trichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 20:52	67490
Surrogate: Dibromofluoromethane -- TCLP	105		85-115	%REC	1	08/01/2012 20:52	67490
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	105		70-120	%REC	1	08/01/2012 20:52	67490
Surrogate: Toluene-d8 -- TCLP	99.2		85-120	%REC	1	08/01/2012 20:52	67490
Surrogate: Bromofluorobenzene -- TCLP	97.3		75-120	%REC	1	08/01/2012 20:52	67490

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 20:59	67473
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 20:59	67473
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 20:59	67473
Pyridine -- TCLP	ND		67	ug/L	1	07/31/2012 20:59	67473
Surrogate: Nitrobenzene-d5 -- TCLP	58.6		40-110	%REC	1	07/31/2012 20:59	67473
Surrogate: 2-Fluorobiphenyl -- TCLP	60.1		50-110	%REC	1	07/31/2012 20:59	67473
Surrogate: Terphenyl-d14 -- TCLP	78.7		50-135	%REC	1	07/31/2012 20:59	67473
Surrogate: Phenol-d5 -- TCLP	36.2		10-115	%REC	1	07/31/2012 20:59	67473
Surrogate: 2-Fluorophenol -- TCLP	44.0		20-110	%REC	1	07/31/2012 20:59	67473
Surrogate: 2,4,6-Tribromophenol -- TCLP	81.1		40-125	%REC	1	07/31/2012 20:59	67473

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:21	67471
Heptachlor -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:21	67471
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:21	67471
Endrin -- TCLP	ND		0.33	ug/L	1	08/01/2012 13:21	67471
Methoxychlor -- TCLP	ND		1.7	ug/L	1	08/01/2012 13:21	67471
Toxaphene -- TCLP	ND		17	ug/L	1	08/01/2012 13:21	67471
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	08/01/2012 13:21	67471
Surrogate: Tetrachloro-m-xylene -- TCLP	74.6		25-140	%REC	1	08/01/2012 13:21	67471
Surrogate: Decachlorobiphenyl -- TCLP	79.5		30-135	%REC	1	08/01/2012 13:21	67471

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8151A -- Chlorinated Herbicides by GC-ECD							**SW8151_W**
2,4-D -- TCLP	ND		3.3	µg/L	1	08/01/2012 17:36	67472
2,4,5-TP (Silvex) -- TCLP	ND		0.33	µg/L	1	08/01/2012 17:36	67472
Surrogate: DCAA -- TCLP	58.3		23-139	%REC	1	08/01/2012 17:36	67472

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-03-003
Lab ID: L1640-03
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A – PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		72	ug/Kg	2	07/31/2012 13:21	67437
Aroclor-1221	ND		72	ug/Kg	2	07/31/2012 13:21	67437
Aroclor-1232	ND		72	ug/Kg	2	07/31/2012 13:21	67437
Aroclor-1242	ND		72	ug/Kg	2	07/31/2012 13:21	67437
Aroclor-1248	ND		72	ug/Kg	2	07/31/2012 13:21	67437
Aroclor-1254	300		72	ug/Kg	2	07/31/2012 13:21	67437
Aroclor-1260	460		72	ug/Kg	2	07/31/2012 13:21	67437
Surrogate: Tetrachloro-m-xylene	56.0		34-147	%REC	2	07/31/2012 13:21	67437
Surrogate: Decachlorobiphenyl	83.1		60-125	%REC	2	07/31/2012 13:21	67437

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

This Page Intentionally Blank

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-04-004
Lab ID: L1640-04
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	07/31/2012 13:15	R68773
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	07/31/2012 15:32	67483
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	07/31/2012 15:55	67484
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.5		1.0	S.U.	1	07/31/2012 15:20	R68778

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-04-004 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: L1640-04 **Collection Date:** 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	ND		20	ug/L	1	08/01/2012 12:11	67475
Barium -- TCLP	460		200	ug/L	1	08/01/2012 12:11	67475
Cadmium -- TCLP	ND		5.0	ug/L	1	08/01/2012 12:11	67475
Chromium -- TCLP	ND		20	ug/L	1	08/01/2012 12:11	67475
Lead -- TCLP	5.2	J	10	ug/L	1	08/01/2012 12:11	67475
Selenium -- TCLP	ND		30	ug/L	1	08/01/2012 12:11	67475
Silver -- TCLP	ND		30	ug/L	1	08/01/2012 12:11	67475
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	08/01/2012 11:16	67476

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-04-004
Lab ID: L1640-04
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
2-Butanone -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
Chloroform -- TCLP	1.3	BJ	5.0	ug/L	1	08/01/2012 21:22	67490
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
Benzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
Trichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:22	67490
Surrogate: Dibromofluoromethane -- TCLP	99.5		85-115	%REC	1	08/01/2012 21:22	67490
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	103		70-120	%REC	1	08/01/2012 21:22	67490
Surrogate: Toluene-d8 -- TCLP	101		85-120	%REC	1	08/01/2012 21:22	67490
Surrogate: Bromofluorobenzene -- TCLP	99.1		75-120	%REC	1	08/01/2012 21:22	67490

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-I40HVD-04-004
Lab ID: L1640-04
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 21:25	67473
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 21:25	67473
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 21:25	67473
Pyridine -- TCLP	ND		67	ug/L	1	07/31/2012 21:25	67473
Surrogate: Nitrobenzene-d5 -- TCLP	71.5		40-110	%REC	1	07/31/2012 21:25	67473
Surrogate: 2-Fluorobiphenyl -- TCLP	74.0		50-110	%REC	1	07/31/2012 21:25	67473
Surrogate: Terphenyl-d14 -- TCLP	88.1		50-135	%REC	1	07/31/2012 21:25	67473
Surrogate: Phenol-d5 -- TCLP	43.5		10-115	%REC	1	07/31/2012 21:25	67473
Surrogate: 2-Fluorophenol -- TCLP	53.4		20-110	%REC	1	07/31/2012 21:25	67473
Surrogate: 2,4,6-Tribromophenol -- TCLP	90.2		40-125	%REC	1	07/31/2012 21:25	67473

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-04-004
Lab ID: L1640-04
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:36	67471
Heptachlor -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:36	67471
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:36	67471
Endrin -- TCLP	ND		0.33	ug/L	1	08/01/2012 13:36	67471
Methoxychlor -- TCLP	ND		1.7	ug/L	1	08/01/2012 13:36	67471
Toxaphene -- TCLP	ND		17	ug/L	1	08/01/2012 13:36	67471
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	08/01/2012 13:36	67471
Surrogate: Tetrachloro-m-xylene -- TCLP	75.3		25-140	%REC	1	08/01/2012 13:36	67471
Surrogate: Decachlorobiphenyl -- TCLP	78.9		30-135	%REC	1	08/01/2012 13:36	67471

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-04-004 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: L1640-04 **Collection Date:** 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8151A -- Chlorinated Herbicides by GC-ECD							**SW8151_W**
2,4-D -- TCLP	ND		3.3	µg/L	1	08/01/2012 17:55	67472
2,4,5-TP (Silvex) -- TCLP	ND		0.33	µg/L	1	08/01/2012 17:55	67472
Surrogate: DCAA -- TCLP	61.5		23-139	%REC	1	08/01/2012 17:55	67472

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-04-004
Lab ID: L1640-04
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		360	ug/Kg	10	07/31/2012 12:24	67437
Aroclor-1221	ND		360	ug/Kg	10	07/31/2012 12:24	67437
Aroclor-1232	ND		360	ug/Kg	10	07/31/2012 12:24	67437
Aroclor-1242	ND		360	ug/Kg	10	07/31/2012 12:24	67437
Aroclor-1248	ND		360	ug/Kg	10	07/31/2012 12:24	67437
Aroclor-1254	1700		360	ug/Kg	10	07/31/2012 12:24	67437
Aroclor-1260	1900		360	ug/Kg	10	07/31/2012 12:24	67437
Surrogate: Tetrachloro-m-xylene	67.9		34-147	%REC	10	07/31/2012 12:24	67437
Surrogate: Decachlorobiphenyl	108		60-125	%REC	10	07/31/2012 12:24	67437

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

This Page Intentionally Blank

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005
Lab ID: L1640-05
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	07/31/2012 13:45	R68773
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	07/31/2012 15:34	67483
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	07/31/2012 15:56	67484
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.3		1.0	S.U.	1	07/31/2012 15:21	R68778

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005
Lab ID: L1640-05
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	ND		20	ug/L	1	08/01/2012 12:14	67475
Barium -- TCLP	450		200	ug/L	1	08/01/2012 12:14	67475
Cadmium -- TCLP	ND		5.0	ug/L	1	08/01/2012 12:14	67475
Chromium -- TCLP	ND		20	ug/L	1	08/01/2012 12:14	67475
Lead -- TCLP	9.0	J	10	ug/L	1	08/01/2012 12:14	67475
Selenium -- TCLP	ND		30	ug/L	1	08/01/2012 12:14	67475
Silver -- TCLP	ND		30	ug/L	1	08/01/2012 12:14	67475
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	0.038	J	0.20	µg/L	1	08/01/2012 11:17	67476

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: L1640-05 **Collection Date:** 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
2-Butanone -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
Chloroform -- TCLP	1.0	BJ	5.0	ug/L	1	08/01/2012 21:53	67490
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
Benzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
Trichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 21:53	67490
Surrogate: Dibromofluoromethane -- TCLP	100		85-115	%REC	1	08/01/2012 21:53	67490
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	100		70-120	%REC	1	08/01/2012 21:53	67490
Surrogate: Toluene-d8 -- TCLP	102		85-120	%REC	1	08/01/2012 21:53	67490
Surrogate: Bromofluorobenzene -- TCLP	99.7		75-120	%REC	1	08/01/2012 21:53	67490

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: L1640-05 **Collection Date:** 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 21:49	67473
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 21:49	67473
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 21:49	67473
Pyridine -- TCLP	ND		67	ug/L	1	07/31/2012 21:49	67473
Surrogate: Nitrobenzene-d5 -- TCLP	57.4		40-110	%REC	1	07/31/2012 21:49	67473
Surrogate: 2-Fluorobiphenyl -- TCLP	59.4		50-110	%REC	1	07/31/2012 21:49	67473
Surrogate: Terphenyl-d14 -- TCLP	76.6		50-135	%REC	1	07/31/2012 21:49	67473
Surrogate: Phenol-d5 -- TCLP	32.1		10-115	%REC	1	07/31/2012 21:49	67473
Surrogate: 2-Fluorophenol -- TCLP	40.1		20-110	%REC	1	07/31/2012 21:49	67473
Surrogate: 2,4,6-Tribromophenol -- TCLP	76.9		40-125	%REC	1	07/31/2012 21:49	67473

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005
Lab ID: L1640-05
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:50	67471
Heptachlor -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:50	67471
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	08/01/2012 13:50	67471
Endrin -- TCLP	ND		0.33	ug/L	1	08/01/2012 13:50	67471
Methoxychlor -- TCLP	ND		1.7	ug/L	1	08/01/2012 13:50	67471
Toxaphene -- TCLP	ND		17	ug/L	1	08/01/2012 13:50	67471
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	08/01/2012 13:50	67471
Surrogate: Tetrachloro-m-xylene -- TCLP	72.0		25-140	%REC	1	08/01/2012 13:50	67471
Surrogate: Decachlorobiphenyl -- TCLP	74.7		30-135	%REC	1	08/01/2012 13:50	67471

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005
Lab ID: L1640-05
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8151A -- Chlorinated Herbicides by GC-ECD							**SW8151_W**
2,4-D -- TCLP	ND		3.3	µg/L	1	08/01/2012 18:15	67472
2,4,5-TP (Silvex) -- TCLP	ND		0.33	µg/L	1	08/01/2012 18:15	67472
Surrogate: DCAA -- TCLP	61.7		23-139	%REC	1	08/01/2012 18:15	67472

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-140HVD-05-005
Lab ID: L1640-05
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/24/12 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		360	ug/Kg	10	07/31/2012 12:43	67437
Aroclor-1221	ND		360	ug/Kg	10	07/31/2012 12:43	67437
Aroclor-1232	ND		360	ug/Kg	10	07/31/2012 12:43	67437
Aroclor-1242	ND		360	ug/Kg	10	07/31/2012 12:43	67437
Aroclor-1248	ND		360	ug/Kg	10	07/31/2012 12:43	67437
Aroclor-1254	2600		360	ug/Kg	10	07/31/2012 12:43	67437
Aroclor-1260	3600		360	ug/Kg	10	07/31/2012 12:43	67437
Surrogate: Tetrachloro-m-xylene	69.6		34-147	%REC	10	07/31/2012 12:43	67437
Surrogate: Decachlorobiphenyl	113		60-125	%REC	10	07/31/2012 12:43	67437

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

MITKEM LABORATORIES

A Division of SPECTRUM ANALYTICAL, INC. Featuring HANDBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 10 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ
07080
908 7695301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278 9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): BRIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

List preservative code below

Notes

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOCs	TCLP SVOCs	TCLP PEST/HERB	TCLP METALS	PCBs	pH/IGNITABILITY	REACTIVE CYANIDE	REACTIVE SULFIDE	TEMPERATURE	Notes
	CD-WC-																		
	140HVD-01-001	7/24/12	1500	C	SO	1		2		X	X	X	X	X	X	X	X		
	140HVD-02-002	7/24/12	1550	C	SO	1		2		X	X	X	X	X	X	X	X		
	140HVD-03-003	7/24/12	1330	C	SO	1	2			X	X	X	X	X	X	X	X		
	140HVD-04-004	7/24/12	1400	C	SO	1	2			X	X	X	X	X	X	X	X		
	140HVD-05-005	7/24/12	1430	C	SO	1	2			X	X	X	X	X	X	X	X		
	140HVD-06-006	7/24/12	0950	G	SO		1							X					
	140HVD-07-007	7/24/12	1010	G	SO		1							X					
	216DEL-01-008	7/25/12	1500	C	SO	1	2			X	X	X	X	X	X	X	X		
	TEMP BLANK	7/25/12	1600			1												X	

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ BTSCHUDI@SEVENSON.COM

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	7/25/12	1700

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Generator's or General Contractor's Certification

I hereby certify based on generator's/GC's knowledge of the project and the documentation, which includes analytical, is to be a true representation of the material presented for disposal. I also believe to the best of my knowledge that the material we are disposing effective _____(Date) from the Cornell Dubilier Superfund Site is characterized as a non- hazardous industrial solid waste, such as contaminated soil (NJDEP ID#27).

I, the undersigned, have the authority by my company to make this statement.

_____ Signature

_____ Printed Name

_____ Title

_____ Date

SAMBONEY

☑ NON-HAZARDOUS Manifest	☐ BILL OF LADING	1. Generator's US EPA ID No. NJD 068 248 087	Project ID No.	2. Page 1 of 1	Doc. No.

GENERATOR

3. Generator's Name and Mailing Address
US EPA Region II / Cornell Dubilier Site
333 Hamilton Blvd, South Plainfield, NJ 07080-3316

Site Address
US EPA Region II / Cornell Dubilier Site
333 Hamilton Blvd
S. Plainfield, NJ 07080
GEN: 129664

4. Generator's Phone (908) 769-1601

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporters Phone
R+B Debris LLC	NJ.R0.0.0.9.6 6 8.0 3	
7. Transporter 2 Company Name	8. US EPA ID Number	A. Transporters Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	A. Facility's Phone
Gloucester County Landfill 508 Monroeville Rd S Harrison Twp, NJ 08096		(856) 478-6045

11. Shipping Name and Description of Materials	12. Containers No.	Type	13. Total Quality	14. Unit Wt/Vol
a. Non DOT-Regulated Material (Site Soils)	0.0.1	CM	Est.	T
b.				
c.				
d.				

D. Additional Description for Materials Listed Above

E. Handling Codes for Material Listed Above

15. Special Handling Instructions and Additional Information

Property ID: _____

24 Hour Emergency Contact: Samboney
(856) 204-3478

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this document are non Hazardous.

Printed / Typed Name	Signature	Month	Day	Year
on Behalf of US EPA				

TRANSPORTER

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed / Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed / Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of materials covered by this document except as noted in Item 19.

Printed / Typed Name	Signature	Month	Day	Year

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NJD068248087	2	(800)326-1221	

5. Generator's Name and Mailing Address
USEPA REG II / CORNELL DUBILIER SITE
333 HAMILTON BLVD
SOUTH PLAINFIELD, NJ 07080-3310
Generator's Phone: (908)769-1601

Generator's Site Address (if different than mailing address)
USEPA REG II / CORNELL DUBILIER SITE
333 HAMILTON BLVD
SOUTH PLAINFIELD, NJ 07080
GEN: 129664

6. Transporter 1 Company Name: R&B DEBRIS, LLC — U.S. EPA ID Number: NJR000966803

7. Transporter 2 Company Name: CSX TRANSPORTATION — U.S. EPA ID Number: PAD030298400

8. Designated Facility Name and Site Address
HERITAGE ENVIRONMENTAL SERVICES
4370 W. COUNTY ROAD 1275 N.
ROACHDALE, IN 46172
Facility's Phone: (765)435-2704
U.S. EPA ID Number: IND980503890

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol	13. Waste Codes
X	1. RQ,UN3432,POLYCHLORINATED BIPHENYLS, SOLID, MIXTURE,9,PGIII,(PCB REMEDIATION WASTE - SOIL)	1	CM		K	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.[illegible] 171 1.W1 0632821_T#3049182 PROPERTY ID: _____
AWMSI WID # 47965 (RQ = 1 LB)
EARLIEST DATE OF REMOVAL FROM SERVICE / /
RAILCAR NO _____ CONTAINER NO _____ ERI:HERITAGE EMERGENCY [1535408]G

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: ON BEHALF OF USEPA — Signature: — Month Day Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only) Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name — Signature — Month Day Year
Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 08/14/2012

TRANSMITTAL NO.: 01450A-55

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
4	Waste Determ - 140 Harvard St (TSCA)	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) 140 Harvard Street Property (Area 1)**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **08/14/12**

Waste Determination (if applicable): TSCA Hazardous*

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility – Heritage Environmental/Roachdale, In
Waste Classification – TSCA Hazardous*

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

*Although sample result did not exceed 50 ppm PCB, historical analysis from this small site area has exhibited elevated levels of PCB and soils represented by this sample will be managed as such.

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	07/31/2012 14:15	R68773
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	07/31/2012 15:37	67483
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	07/31/2012 15:57	67484
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.1		1.0	S.U.	1	07/31/2012 15:23	R68778

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic – TCLP	ND		20	ug/L	1	08/01/2012 12:18	67475
Barium – TCLP	980		200	ug/L	1	08/01/2012 12:18	67475
Cadmium – TCLP	6.3		5.0	ug/L	1	08/01/2012 12:18	67475
Chromium – TCLP	2.2	J	20	ug/L	1	08/01/2012 12:18	67475
Lead – TCLP	320		10	ug/L	1	08/01/2012 12:18	67475
Selenium – TCLP	ND		30	ug/L	1	08/01/2012 12:18	67475
Silver – TCLP	ND		30	ug/L	1	08/01/2012 12:18	67475
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury – TCLP	0.043	J	0.20	µg/L	1	08/01/2012 11:22	67476

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
2-Butanone -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
Chloroform -- TCLP	1.1	BJ	5.0	ug/L	1	08/01/2012 22:22	67490
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
Benzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
Trichloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	08/01/2012 22:22	67490
Surrogate: Dibromofluoromethane -- TCLP	103		85-115	%REC	1	08/01/2012 22:22	67490
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	106		70-120	%REC	1	08/01/2012 22:22	67490
Surrogate: Toluene-d8 -- TCLP	99.8		85-120	%REC	1	08/01/2012 22:22	67490
Surrogate: Bromofluorobenzene -- TCLP	97.4		75-120	%REC	1	08/01/2012 22:22	67490

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
2-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
4-Methylphenol -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
Hexachloroethane -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
Nitrobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 22:13	67473
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	07/31/2012 22:13	67473
Pentachlorophenol -- TCLP	ND		67	ug/L	1	07/31/2012 22:13	67473
Pyridine -- TCLP	ND		67	ug/L	1	07/31/2012 22:13	67473
Surrogate: Nitrobenzene-d5 -- TCLP	59.3		40-110	%REC	1	07/31/2012 22:13	67473
Surrogate: 2-Fluorobiphenyl -- TCLP	59.6		50-110	%REC	1	07/31/2012 22:13	67473
Surrogate: Terphenyl-d14 -- TCLP	77.6		50-135	%REC	1	07/31/2012 22:13	67473
Surrogate: Phenol-d5 -- TCLP	37.2		10-115	%REC	1	07/31/2012 22:13	67473
Surrogate: 2-Fluorophenol -- TCLP	45.3		20-110	%REC	1	07/31/2012 22:13	67473
Surrogate: 2,4,6-Tribromophenol -- TCLP	75.0		40-125	%REC	1	07/31/2012 22:13	67473

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	08/01/2012 14:05	67471
Heptachlor -- TCLP	ND		0.17	ug/L	1	08/01/2012 14:05	67471
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	08/01/2012 14:05	67471
Endrin -- TCLP	ND		0.33	ug/L	1	08/01/2012 14:05	67471
Methoxychlor -- TCLP	ND		1.7	ug/L	1	08/01/2012 14:05	67471
Toxaphene -- TCLP	ND		17	ug/L	1	08/01/2012 14:05	67471
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	08/01/2012 14:05	67471
Surrogate: Tetrachloro-m-xylene -- TCLP	70.0		25-140	%REC	1	08/01/2012 14:05	67471
Surrogate: Decachlorobiphenyl -- TCLP	71.9		30-135	%REC	1	08/01/2012 14:05	67471

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8151A -- Chlorinated Herbicides by GC-ECD							SW8151_W
2,4-D -- TCLP	ND		3.3	µg/L	1	08/01/2012 18:34	67472
2,4,5-TP (Silvex) -- TCLP	ND		0.33	µg/L	1	08/01/2012 18:34	67472
Surrogate: DCAA -- TCLP	60.5		23-139	%REC	1	08/01/2012 18:34	67472

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/02/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008
Lab ID: L1640-08
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		36	ug/Kg	1	07/31/2012 11:27	67437
Aroclor-1221	ND		36	ug/Kg	1	07/31/2012 11:27	67437
Aroclor-1232	ND		36	ug/Kg	1	07/31/2012 11:27	67437
Aroclor-1242	ND		36	ug/Kg	1	07/31/2012 11:27	67437
Aroclor-1248	ND		36	ug/Kg	1	07/31/2012 11:27	67437
Aroclor-1254	260		36	ug/Kg	1	07/31/2012 11:27	67437
Aroclor-1260	340		36	ug/Kg	1	07/31/2012 11:27	67437
Surrogate: Tetrachloro-m-xylene	58.5		34-147	%REC	1	07/31/2012 11:27	67437
Surrogate: Decachlorobiphenyl	79.2		60-125	%REC	1	07/31/2012 11:27	67437

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC ISCHUDI

Date

7/25/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/25/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY, 90°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D - PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT SOIL SAMPLES FROM RESIDENTIAL PROPERTIES 140 HARVARD, 216-220 DELMORE.

Description of Chemical Data Acquisition Work Performed: TCLP VOCs, TCLP SVOCs, TCLP PESTICIDES, TCLP HERBICIDES, TCLP METALS, PCBs, pH, IGNITIBILITY, REACTIVE CYANIDE, REACTIVE SULFIDE.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO KUTKEN LABORATORIES VIA FED EX - OVERNIGHT.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/25/12 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK ONLY	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/25/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: _____

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/25/12
CQC Systems Manager	[illegible]	[illegible]	7.25.12

MITKEM LABORATORIES

A Division of SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 10 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ
07080
908 7695301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278 9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State specific reporting standards: _____

Lab Id:	CD-WC- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOCs	TCLP SVOCs	TCLP PEST/HERB	TCLP METALS	PCBs	PH/IGNITABILITY	REACTIVE CYANIDE	REACTIVE SULFIDE	TEMPERATURE	Notes
	140HVD-01-001	7/24/12	1500	C	SO	1		2		X	X	X	X	X	X	X	X		
	140HVD-02-002	7/24/12	1550	C	SO	1		2		X	X	X	X	X	X	X	X		
	140HVD-03-003	7/24/12	1330	C	SO	1	2			X	X	X	X	X	X	X	X		
	140HVD-04-004	7/24/12	1400	C	SO	1	2			X	X	X	X	X	X	X	X		
	140HVD-05-005	7/24/12	1430	C	SO	1	2			X	X	X	X	X	X	X	X		
	140HVD-06-006	7/24/12	0950	G	SO		1							X					
	140HVD-07-007	7/24/12	1010	G	SO		1							X					
	216DEL-01-008	7/25/12	1500	C	SO	1	2			X	X	X	X	X	X	X	X		
	TEMP BLANK	7/25/12	1100			1												X	

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ ETSCHUDI@SEVENSON.COM

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	7/25/12	1700

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C _____

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 08/23/2012

TRANSMITTAL NO.: 01450A-62

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [ ] GA [X] DA [X] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 6) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
5	Waste Determ - 216-220 Delmore Non-Haz	TEST REPORTS	0	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: Sample ID(s) 216-220 Delmore Ave

Prepared By: Ken Paisley

CC: Kim Lickfield

Date: 08/22/12

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility – Gloucester County Improvement Authority
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
08-Aug-12 09:25

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L1640
Project: Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L1640-01~~	~~CD-WC-140HVD-01-001~~	~~Soil~~	~~24-Jul-12 15:00~~	~~26-Jul-12 08:45~~
L1640-02	CD-WC-140HVD-02-002	Soil	24-Jul-12 15:50	26-Jul-12 08:45
L1640-03	CD-WC-140HVD-03-003	Soil	24-Jul-12 13:30	26-Jul-12 08:45
L1640-04	CD-WC-140HVD-04-004	Soil	24-Jul-12 14:00	26-Jul-12 08:45
L1640-05	CD-WC-140HVD-05-005	Soil	24-Jul-12 14:30	26-Jul-12 08:45
L1640-06	CD-WC-140HVD-06-006	Soil	24-Jul-12 09:50	26-Jul-12 08:45
~~L1640-07~~	~~CD-WC-140HVD-07-007~~	~~Soil~~	~~24-Jul-12 10:10~~	~~26-Jul-12 08:45~~
L1640-08	CD-WC-216DEL-01-008	Soil	25-Jul-12 15:00	26-Jul-12 08:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/07/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-216DEL-01-008 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: L1640-08 **Collection Date:** 07/25/12 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	07/31/2012 14:15	R68773
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	07/31/2012 15:37	67483
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	07/31/2012 15:57	67484
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.1		1.0	S.U.	1	07/31/2012 15:23	R68778

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-216DEL-01-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1640 Mod. Ref No.: SDG No.: SL1640

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1640-08B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M8105.D

Level: (TRACE/LOW/MED) LOW Date Received: 07/26/2012

% Moisture: not dec. Date Analyzed: 08/01/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	1.1	J
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-216DEL-01-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1640 Mod. Ref No.: SDG No.: SL1640

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1640-08A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I1458.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 07/26/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 07/31/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/31/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-216DEL-01-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1640 Mod. Ref No.: SDG No.: SL1640

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1640-08A

Sample wt/vol: 300 (g/mL) ML Lab File ID: E5J0154F.D/E5J0154R.D

% Moisture: Decanted: (Y/N) Date Received: 07/26/2012

Extraction: (Type) SEPF Date Extracted: 07/31/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/01/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
58-89-9	gamma-BHC (Lindane)	0.17	U
76-44-8	Heptachlor	0.17	U
1024-57-3	Heptachlor epoxide	0.17	U
72-20-8	Endrin	0.33	U
72-43-5	Methoxychlor	1.7	U
8001-35-2	Toxaphene	17	U
12789-03-6	Chlordane (technical)	8.3	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-216DEL-01-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1640 Mod. Ref No.: SDG No.: SL1640

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1640-08A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3J1612F.D/E3J1612R.D

% Moisture: 8.1 Decanted: (Y/N) N Date Received: 07/26/2012

Extraction: (Type) SONC Date Extracted: 07/26/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	260	P
11096-82-5	Aroclor-1260	340	

1 - FORM I HERB

CHLORINATED HERBICIDE ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-216DEL-01-008

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1640 Mod. Ref No.: SDG No.: SL1640

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1640-08A

Sample wt/vol: 300 (g/mL) ML Lab File ID: E5J0169F.D/E5J0169R.D

% Moisture: Decanted: (Y/N) Date Received: 07/26/2012

Extraction: (Type) SEPF Date Extracted: 07/31/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/01/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
94-75-7	2,4-D	3.3	U
93-72-1	2,4,5-TP (Silvex)	0.33	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-216DEL-01-008

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1640

Matrix (soil/water): WATER Lab Sample ID: L1640-08

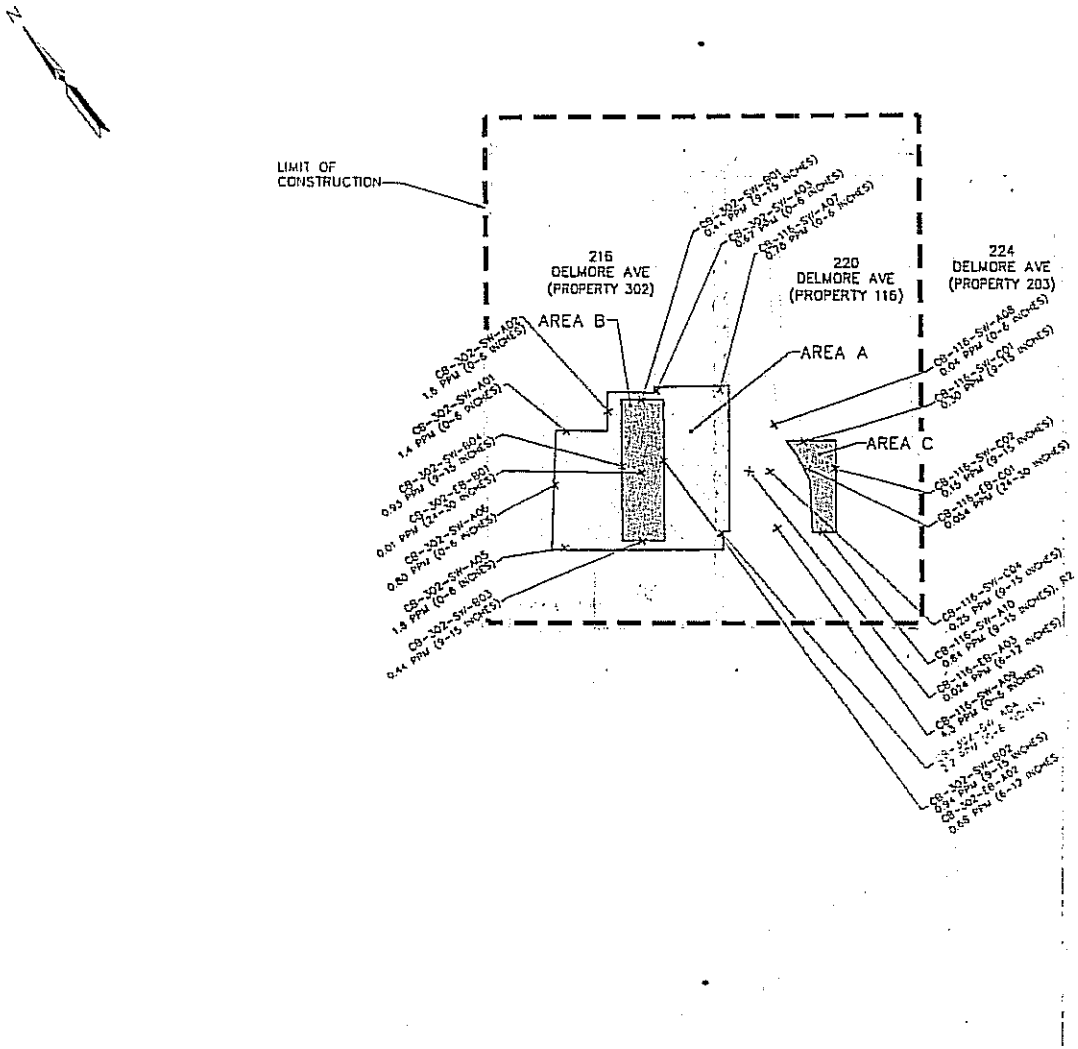
Level (low/med): MED Date Received: 07/26/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	977			P
7440-43-9	Cadmium	6.3			P
7440-47-3	Chromium	2.2	B		P
7439-92-1	Lead	318			P
7439-97-6	Mercury	0.043	B		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:



LEGEND

INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-24" BELOW GROUND SURFACE (BGS)

LEGEND FOR 2008/2011 SAMPLES

+ 2011 CONFIRMATION SOIL SAMPLE LOCATION AND ID (NOTE: LOCATIONS ARE APPROXIMATE)

2011 SOIL SAMPLE LOCATION AND ID

PCB CONCENTRATION IN SHALLOW/DEEP SAMPLE IN mg/kg

PCB CONCENTRATION IN SHALLOW (S) SAMPLE IN mg/kg

ORIGINAL 2011 SAMPLE PCB CONCENTRATION IN mg/kg
CRUTED 2011 SAMPLE PCB CONCENTRATION IN mg/kg

NOTE:
RED/BOLD REPRESENTS SAMPLES MEETING OR EXCEEDING RCD CRITERION OF 1.0 mg/kg

SAMPLE IDENTIFICATION FOR 2008/2011 SAMPLES

304-01
SEQUENTIAL SAMPLE NUMBER
PROPERTY ID

TABLE 2b – VOLUME OF EXCAVATION		
AREA	SQ FT	VOLUME
A	575	16 CY
B	361	22 CY
C	135	11 CY
TOTAL EXCAVATION VOLUME		52 CY

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 2a. COORDINATES MAY CHANGE BASED ON SURVEY DATA CONFIRMATION.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER

GRAPHIC SCALE
10' 0 10' 20' 30'
SCALE 1"= 10'-0"

NOTE TO USACE REVIEWER

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS HAVE CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS MAY NOW BE SHOWN ON ROADWAYS, SIDEWALKS, ETC.) HISTORICAL SAMPLING LOCATIONS HAVE NOT BEEN REVISED.

ARCADIS ARCADIS

REVISIONS

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 116 & 302
EXCAVATION PLAN
WITH CONFIRMATORY SAMPLES

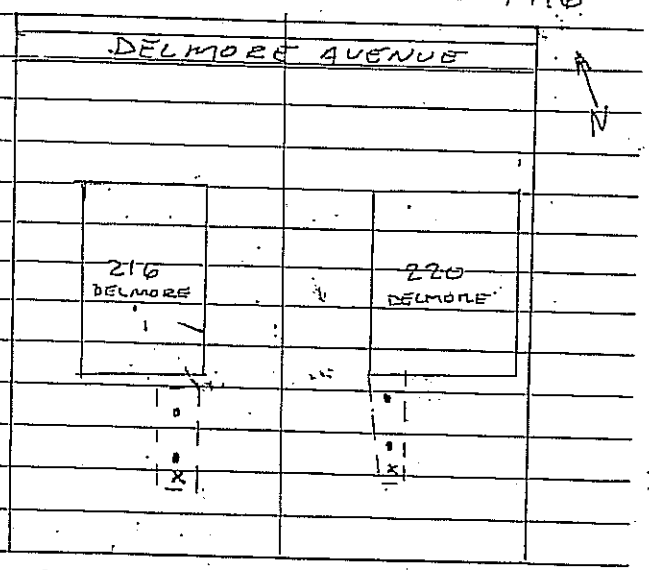
JOB NO.
CONTRACT NO.
SHEET NAME: FIGURE 2B
DRAWN BY: M. IANICELLI
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
SHEET 11 OF 15
FILE NAME
DATE: JANUARY 2012

WC SAMPLING 7/25/12

216/220 DELMORE AVE. (17)

1400 E. TSCHUDI ARRIVES AT 216-220 DEMORE AVE.

216-220 DELMORE AVE (PROPERTY 302) + PROPERTY 116



• = DENOTES COMPOSITE SOIL SAMPLE LOCATION TO MAKEUP SOIL SAMPE: X = LOCATION OF PCB SAMPLE.

CD-WC-216DEL-01-008

1410 BEGIN TO ADVANCE AUGER AT 220 DELMORE PROPERTY IN BACK YARD. NO ONE ANSWERED DOOR BELL/KNOCK ON DOOR. COLLECT SOIL MATERIAL FROM 0-24". MOVE TO SECOND HOLE ON PROP. REFUSAL AT 6"-OFFSET-COLLECT TO 24".

[signature] 7/25/12 "Rite in the Rain"

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

Eric Fischer

Date

7/25/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/25/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY, 90°F

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D - PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT SOIL SAMPLES FROM RESIDENTIAL PROPERTIES 140 HARVARD, 216-220 DELMORE.

Description of Chemical Data Acquisition Work Performed: TCLP VOCs, TCLP SVOCs, TCLP PESTICIDES, TCLP HERBICIDES, TCLP METALS, PCBs, pH IGNITIBILITY, REACTIVE CYANIDE, REACTIVE SULFIDE

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO KUTKER LABORATORIES VIA FED EX - OVERNIGHT.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/25/12 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK ONLY	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIK TSCHUDI

Date

7/25/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: _____

☐ PREPARATORY PHASE

Yes	No	N/A		Comment
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	No	N/A		Comment
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[signature]	7/25/12
CQC Systems Manager	[illegible]	[signature]	7-25-12

MITKEM LABORATORIES
A Division of SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 10 DAY
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ
07080
908 7695301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278 9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): BRIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (CD-WC-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOCs	TCLP SVOCs	TCLP PEST/HERB	TCLP METALS	PCBs	pH/IGNITABILITY	REACTIVE CYANIDE	REACTIVE SULFIDE	TEMPERATURE
	140HVD-01-001	7/24/12	1500	G	SO	1		2		X	X	X	X	X	X	X	X	
	140HVD-02-002	7/24/12	1550	C	SO	1		2		X	X	X	X	X	X	X	X	
	140HVD-03-003	7/24/12	1330	C	SO	1	2			X	X	X	X	X	X	X	X	
	140HVD-04-004	7/24/12	1400	C	SO	1	2			X	X	X	X	X	X	X	X	
	140HVD-05-005	7/24/12	1430	C	SO	1	2			X	X	X	X	X	X	X	X	
	140HVD-06-006	7/24/12	0950	G	SO		1							X				
	140HVD-07-007	7/24/12	1010	G	SO		1							X				
	216DEL-01-008	7/25/12	1500	C	SO	1	2			X	X	X	X	X	X	X	X	
	TEMP BLANK	7/25/12	1600			1												X

E-mail to KLICKFIELD@SEVENSON.COM
EDD Format BTSCHUDI@SEVENSON.COM

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	7/25/12	1700

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 08/23/2012

TRANSMITTAL NO.: 01450A-63

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
6	Waste Determin - 605 Hamilton Non-Hazard	TEST REPORTS	2	1.4		A	N	F

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Neyland, COR

DATE: 29 Aug 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 08/23/2012

TRANSMITTAL NO.: 01450A-63

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
6	Waste Determin - 605 Hamilton Non-Hazard	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) 605 Hamilton Property**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **08/22/12**

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility – Gloucester County Improvement Authority
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
16-Aug-12 13:52

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L1683
Project: Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L1683-01	CD-WC-605HAM-01-020	Soil	01-Aug-12 16:10	03-Aug-12 08:44

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-605HAM-01-020

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1683 Mod. Ref No.: SDG No.: SL1683

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1683-01B

Sample Wt/vol: 5.00 (g/mL) ML Lab File ID: V6I8903.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/03/2012

% Moisture: not dec. Date Analyzed: 08/09/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-605HAM-01-020

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1683 Mod. Ref No.: SDG No.: SL1683

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1683-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I1557.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 08/03/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 08/08/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 08/09/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-605HAM-01-020

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1683 Mod. Ref No.: SDG No.: SL1683

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1683-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: E5J0219F.D/E5J0219R.D

% Moisture: Decanted: (Y/N) Date Received: 08/03/2012

Extraction: (Type) SEPF Date Extracted: 08/08/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
58-89-9	gamma-BHC (Lindane)	0.17	U
76-44-8	Heptachlor	0.17	U
1024-57-3	Heptachlor epoxide	0.17	U
72-20-8	Endrin	0.33	U
72-43-5	Methoxychlor	1.7	U
8001-35-2	Toxaphene	17	U
12789-03-6	Chlordane (technical)	8.3	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-605HAM-01-020

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1683 Mod. Ref No.: SDG No.: SL1683

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1683-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J1640F.D/E3J1640R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 08/03/2012

Extraction: (Type) SONC Date Extracted: 08/06/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	220	P
11096-82-5	Aroclor-1260	400	P

1 - FORM I HERB

CHLORINATED HERBICIDE ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-605HAM-01-020

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1683 Mod. Ref No.: SDG No.: SL1683

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1683-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: E5J0230F.D/E5J0230R.D

% Moisture: Decanted: (Y/N) Date Received: 08/03/2012

Extraction: (Type) SEPF Date Extracted: 08/08/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
94-75-7	2,4-D	3.3	U
93-72-1	2,4,5-TP (Silvex)	0.33	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-WC-605HAM-01-020

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1683

Matrix (soil/water): WATER Lab Sample ID: L1683-01

Level (low/med): MED/ Date Received: 08/03/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	406			P
7440-43-9	Cadmium	1.5	B		P
7440-47-3	Chromium	1.1	B	U	P
7439-92-1	Lead	12.7			P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

08/14/2012

Client: Sevenson Environmental Services Inc.
Client Sample ID: CD-WC-605HAM-01-020
Lab ID: L1683-01

Project: Cornell Dubilier Superfund Site OU1
Collection Date: 08/01/12 16:10

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	NO FLASH @ 140		200	°F	1	08/06/2012 9:45	R68894
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	08/07/2012 10:39	67530
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	ND		1.1	mg/Kg	1	08/03/2012 14:27	67531
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.7		1.0	S.U.	1	08/07/2012 12:02	R68874

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/02/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY CLOUDY - RAIN AT TIMES. 83°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D - PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: PERFORM WASTE CHARACTERIZATION SAMPLING, AT OUT RESIDENTIAL PROPERTIES.

Description of Chemical Data Acquisition Work Performed: TCLP VOC, TCLP SVOC, TCLP PEST., TCLP HERB., TCLP METALS, PCBs, REACTIVE CYANIDE, REATIVE SULFIDE.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLE SHIPPED TO MITKEM LABORATORIES VIA FED EX.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/02/12 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/02/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/02/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: AUGUST 2, 2012

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/02/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/02/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

_____

_____

_____

Sevenson Project Manager_____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		8/02/12
CQC Systems Manager			8-2-12

Severson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITICEM LABORATORIES

Fax Number: 401 732 3400

Phone Number: 401 732 3499

From: ERIC TSCHUDI

Date: 8/02/12

Subject: COC, FED EX AIR BILL FOR SOIL SAMPLES.

Pages: 5

Comments:

PLEASE CALL WITH QUESTIONS.

THANK YOU!

ERIC

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
TAT- Indicate Date Needed: 10 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ
07080
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLANFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____
State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	PCB ONLY								
	216DEL-01-009	8/01/12	1110	G	SO		1			X								
	220DEL-01-010	8/01/12	1120	G	SO		1			X								
	605HAM-A1-011	8/01/12	1410	G	SO		1			X								
	605HAM-B1-012	8/01/12	1420	G	SO		1			X								
	605HAM-C1-013	8/01/12	1430	G	SO		1			X								
	605HAM-C2-014	8/01/12	1440	G	SO		1			X								
	605HAM-E1-015	8/01/12	1450	G	SO		1			X								
	108DEL-G1-016	8/01/12	1500	G	SO		1			X								
	108DEL-H1-017	8/01/12	1520	G	SO		1			X								
	108DEL-H2-018	8/01/12	1540	G	SO		1			X								

☐ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format _____

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	8/02/12	1500

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C _____

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
TAT- Indicate Date Needed: 10 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
333 HAMILTON BLVD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: _____ RQN: _____

Project No.: 6278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9=_____ 10=_____ 11=_____

List preservative code below:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	PCBs ONLY	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TCLP METALS	pH/IGNITABILITY	REACTIVE CYANIDE	REACTIVE SULFIDE	TEMPERATURE
	112DELH3-019	8/01/12	1600	G	SO		1			X								
	605HAM-01-020	8/01/12	1610	C	SO	1	2				X	X	X	X	X	X	X	
	TEMP BLANK	8/02/12	1200			1												X

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

☐ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format _____

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C _____

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	8/02/12	1500

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J122012071603 25

Ship Date: 02AUG12
ActWgt: 47.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 03 AUG A1
PRIORITY OVERNIGHT

TRK# 7938 5925 0721
0201

ZA NCOA

02886
RI-US
PVD

5I5G1/A270/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 793859250721
Ship date: 08/02/2012
Estimated shipping charges: 58.91

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 47 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: pickup confirmation number:LDJA74

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/06/2012

TRANSMITTAL NO.: 01450A-117

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
9	Info Sample #021 - 1000 Garibaldi Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 46.0 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
23-Oct-12 23:16

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2093
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
L2093-02	CDE-OU1-1000GAR-RW1-021	Soil	03-Oct-12 14:50	04-Oct-12 09:18

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

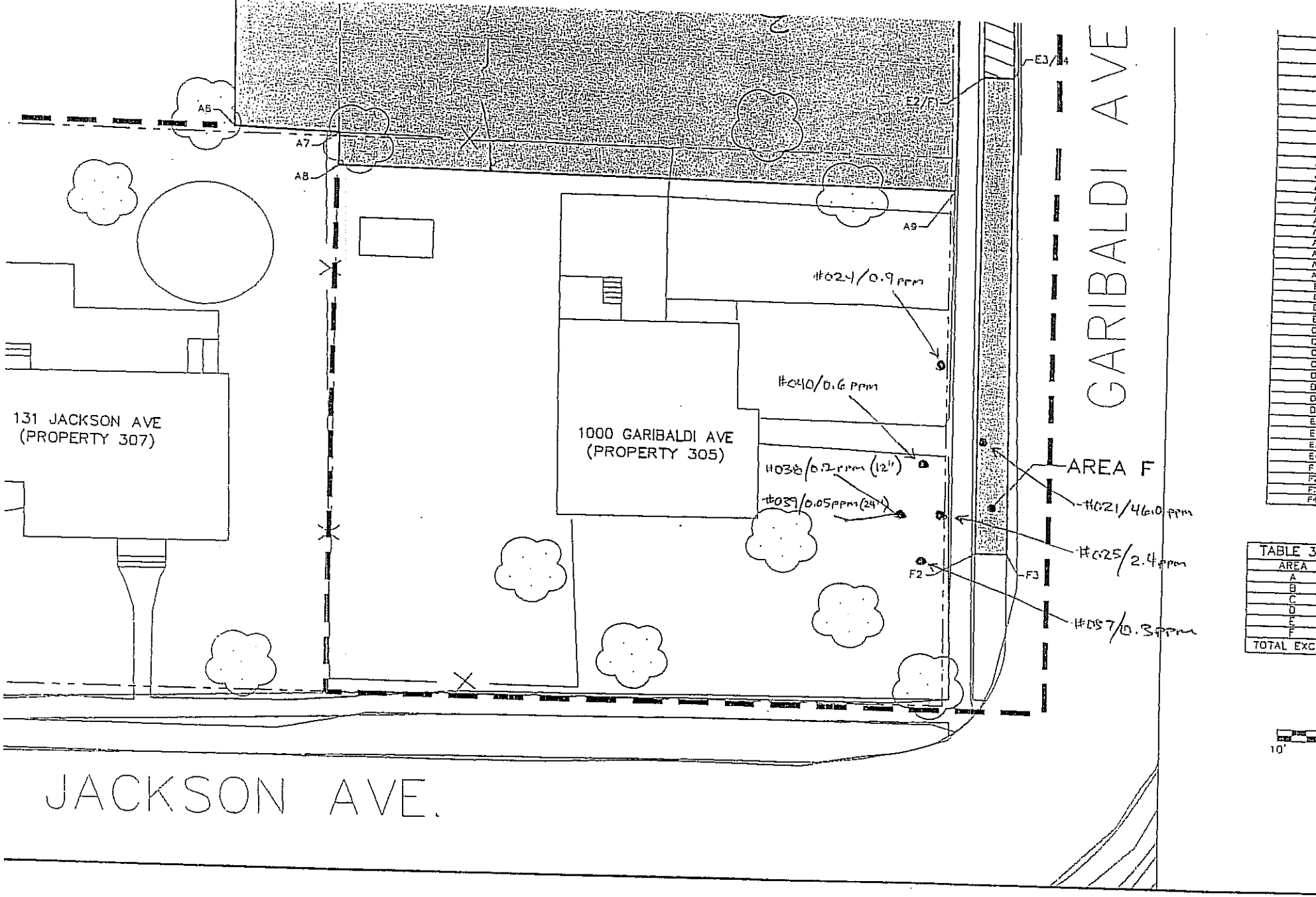


TABLE 3

AREA
A
B
C
D
E
F
TOTAL EXC

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-1000GAR-RW1-021

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2093 Mod. Ref No.: SDG No.: SL2093

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2093-02A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J5952F.D/E3J5952R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 10/04/2012

Extraction: (Type) SONC Date Extracted: 10/04/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/04/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 200.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	8100	U
11104-28-2	Aroclor-1221	8100	U
11141-16-5	Aroclor-1232	8100	U
53469-21-9	Aroclor-1242	8100	U
12672-29-6	Aroclor-1248	8100	U
11097-69-1	Aroclor-1254	46000	
11096-82-5	Aroclor-1260	8100	U
37324-23-5	Aroclor-1262	8100	U
11100-14-4	Aroclor-1268	8100	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2093 Mod. Ref No.: SDG No.: SL2093

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68536	74		74		90		103				0
02	LCS-68536	80		79		96		110				0
03	CDE-OU1-140H VD-03-022	68		69		82		96				0
04	CDE-OU1-1000 GAR-RW1-021	0	D	0	D	0	D	0	D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2093 Mod. Ref No.: SDG No.: SL2093

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 07/05/2012 07/06/2012

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.225 DCB: 13.747

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605Z3	E3J3340R.D	7/6/2012	2:17	4.224	13.749
29	AR16603AZ	E3J5942R.D	10/4/2012	10:37	4.234	13.757
30	AR12543AZ	E3J5943R.D	10/4/2012	10:56	4.228	13.737
31	MB-68536	E3J5947R.D	10/4/2012	14:52	4.235	13.767
32	LCS-68536	E3J5948R.D	10/4/2012	15:11	4.234	13.764
33	CDE-OU1-140H VD-03-022	E3J5949R.D	10/4/2012	15:30	4.232	13.744
34	CDE-OU1-1000 GAR-RW1-021	E3J5952R.D	10/4/2012	16:42	*	*
35	AR16603ZA	E3J5954R.D	10/4/2012	17:19	4.219	13.703
36	AR12543ZA	E3J5955R.D	10/4/2012	17:39	4.218	13.703

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/03/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? — TEMP BLANK INCLUDED.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/03/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/03/12

☒ PREPARATORY PHASE

Yes	No	N/A		Comment
☒	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☒	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☒	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☒	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☒	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☒	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☒	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☒	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☒	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☒ FOLLOW-UP PHASE

Yes	No	N/A		Comment
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	ERIC TSCHUDI		10/03/12
CQC Systems Manager			10/3/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: WEDNESDAY 10/03/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/03/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/03/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: OVERCAST. 72°F HUMID. LIGHT RAIN AT TIMES.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: PROPER PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION

Description of Chemical Data Acquisition Work Performed: NONE

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE — SAMPLES SHIPPED VIA FEDEX-TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken):

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON PROJ MGR.
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL DUBILIER SUPERFUND
Location: 333 HAMILTON BLVD. S. PLAINFIELD, State: NJ
Sampler(s): E-TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-001-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs 1262, 1268	Temp.							
	140HVD-03-022	10/03/12	1505	G	SO		1			X								
	1000GAR-RW1-021	10/03/12	1450	G	SO		1			X								
	Temp Blank										X							

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
• KLICKFIELD@SEVENSON.COM
• ANOVAK@SEVENSON.COM
EDD Format

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FED EX	10/03/12	1800

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

FedEx Shipment Receipt

Address Information

Ship to:
Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI
028861784
US
4017323400

Ship from:
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ
07080
US
9087695301

Shipment Information:
Tracking no.: 799114060569
Ship date: 10/03/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

PCB SAMPLING 10/03/12
1000 GAR/140HUD. AVE.

(25)

10/03/12

1000 GARIBALDI

1450 COLLECT ONE 8OZ SOIL JAR FROM 1' BLS WITHIN RIGHT OF WAY IN FRONT OF RESIDENCE AT 1000 GARIBALDI AS PER DIRECTION OF DIEGO GARCIA, EPA RPM. PRESENT ARE: E. TSCHUDI, K. LICKFIELD P. NOVAK, P. SINGH (LABOR) OF SEVENSON. P. NEJAND, USACE.

WEATHER IS FULLY OVERCAST MIST/FOG, 73°F. P. SINGH DIGS HOLE 1' BLS AT EDGE OF SIDEWALK BETWEEN SIDEWALK AND STREET. USE CLEAN STAINLESS STEEL TROWEL TO COLLECT SOIL SAMPLE:

CDE-OU1-1000GAR-RW1-021

SAMPLE TO BE ANALYZED FOR TOTAL PCBs + AROCLORS 1262 AND 1268.

SAMPLE TO BE SHIPPED TO MITKEM LAB - SEE LAB INFO AT BULLET ON PREVIOUS PAGE OF THIS LOG BOOK, P. 24.

1505 COLLECT PCB SOIL SAMPLE IN BACK YARD OF 140 HARVARD AVE. SAMPLE COLLECTED WITHIN AREA 3 - SEE SAMPLE MAP ON P. 7 OF THIS LOG BOOK. SAMPLE COLLECTED WITHIN ACTIVE EXCAVATION AT A DEPTH OF APPROX. 1' BLS TO 2' BLS. SAMPLE FROM 12"-24" BLS.

[signature] 10/03/12. [signature]

10/03/12 PCB SAMPLING - SOIL

(26) 140 HARVARD

WEATHER: 72°F FOGGY MIST.

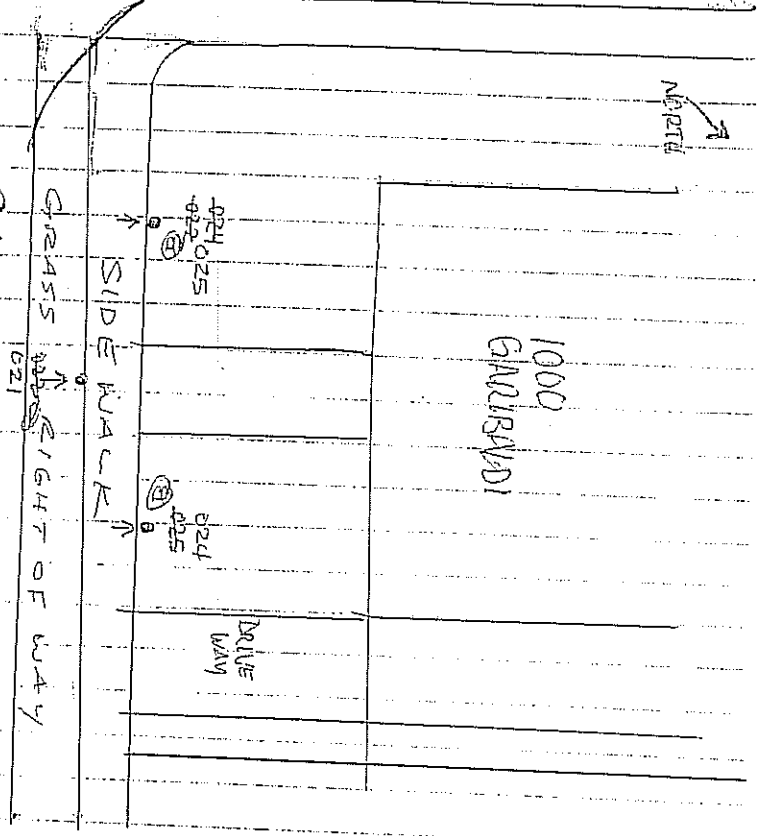
CONTINUED FROM P. 25. SOIL SAMPLE COLLECTED AT THE DIRECTION OF K. LICKFIELD AND D. GARCIA. SAMPLE ID: GDE-001-140HVD-03-022. SAMPLE WILL BE ANALYZED FOR TOTAL PCBs PLUS AROCLORS 1262 AND 1268. SEE P. 24 FOR LAB INFO. SAMPLE TIME: 1505, 8 oz JAR (AMBER). TWO SAMPLES ON COC FOR SHIPMENT TO LAB. DOUBLE BAGGED, WITH ICE, IN COOLER. SAMPLE AT 140 HARVARD AVE. COLLECTED WITHIN AREA 3 - AT A POINT 35' FROM BACK OF PROPERTY LINE WITH 1000 GARIBALDI, AND 15' IN FROM THE EDGE OF THE SIDEWALK. A WOOD STAKE MARKS THE LOCATION TO BE LOCATED BY PROF. SURVEY - LAY OUT INC.

10/09/12

(27)

Sample location Map

1000 GARIBALDI



SUMMARY:

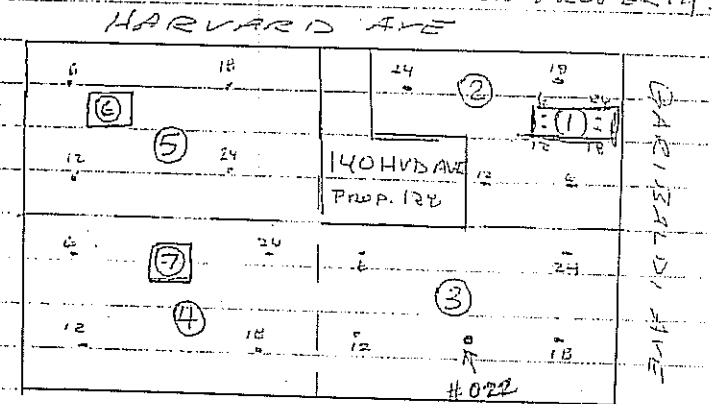
7/18/12 (7)

140 HARVARD AVE

~~1400~~ 1330 PARTLY CLOUDY, HUMID 96°F.

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ. 07080. (PROPERTY 128)

INFORMED HOME OWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 ~~7/18/12~~ 1500 ~~1515~~	CD-WC-140HVD-01-001
2	7/24/12 ~~7/18/12~~ 1550 ~~1650~~	CD-WC-140HVD-02-002
3	7/24/12 ~~7/23/12~~ 1330 ~~1450~~	CD-WC-140HVD-03-003
4	7/24/12 ~~7/23/12~~ 1400 ~~1600~~	CD-WC-140HVD-04-004
5	7/24/12 ~~0915~~ 1430	CD-WC-140HVD-05-005
6	7/24/12	0950	CD-WC-140HVD-06-006
7	7/24/12	1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

Eric Tschudi 7/18/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/06/2012

TRANSMITTAL NO.: 01450A-118

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
10	Final Sample #022 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample passed criteria for PCB's at 0.21 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
23-Oct-12 23:16

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: L2093
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2093-01	CDE-OU1-140HVD-03-022	Soil	03-Oct-12 15:05	04-Oct-12 09:18
~~L2093-02~~	~~CDE-OU1-140HVD-03-021~~	~~Soil~~	~~[illegible]~~	~~[illegible]~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

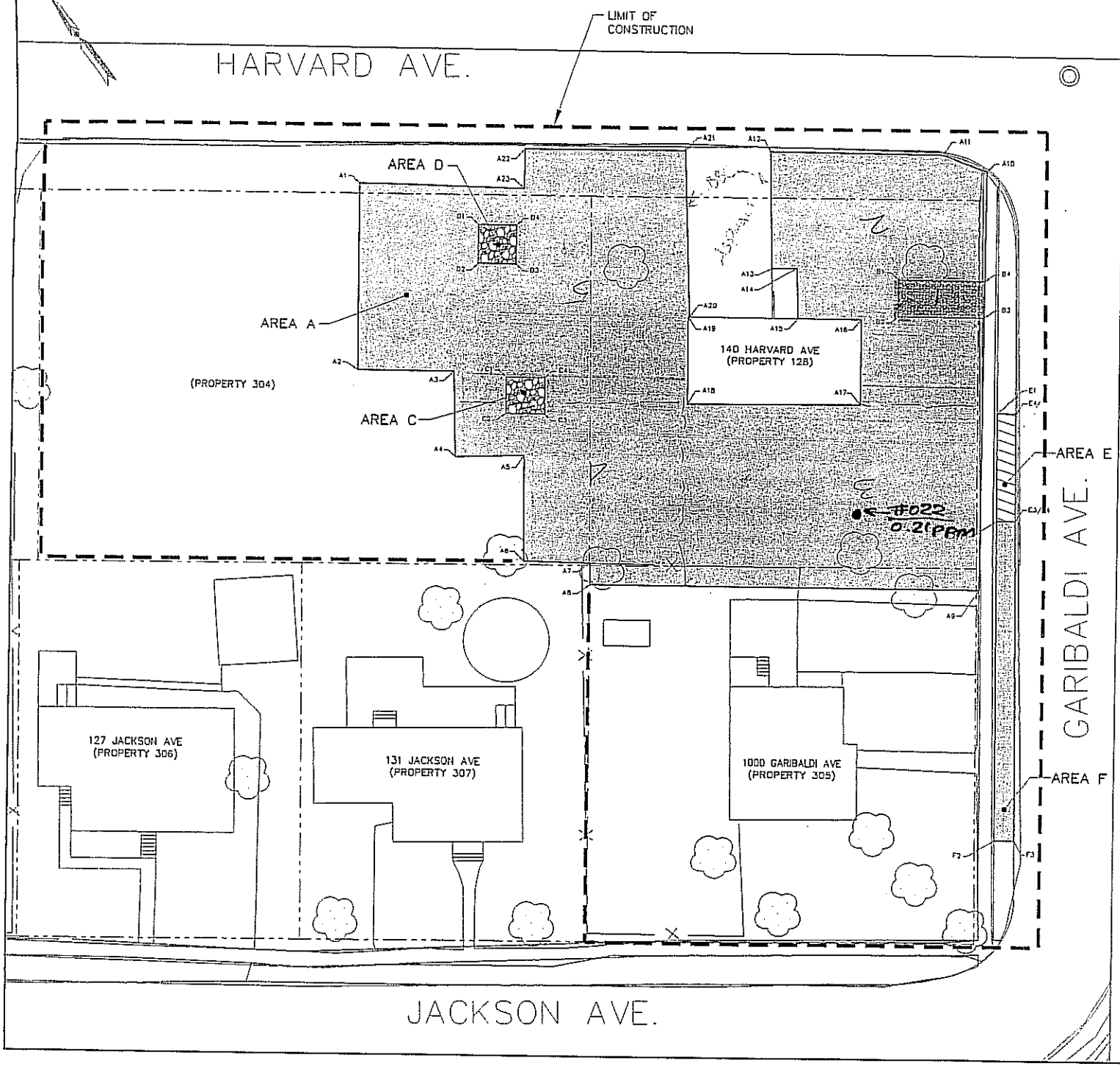
Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHE BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEA IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALK ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WIT ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKE IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION, COORDINATE WITH APPLICABLE UTILITY COMPANIES AN IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y NORTHING	X EASTING
A1	[illegible]	[illegible]
A2	[illegible]	[illegible]
A3	[illegible]	[illegible]
A4	[illegible]	[illegible]
A5	[illegible]	[illegible]
A6	[illegible]	[illegible]
A7	[illegible]	[illegible]
A8	[illegible]	[illegible]
A9	[illegible]	[illegible]
A10	[illegible]	[illegible]
A11	[illegible]	[illegible]
A12	[illegible]	[illegible]
A13	[illegible]	[illegible]
A14	[illegible]	[illegible]
A15	[illegible]	[illegible]
A16	[illegible]	[illegible]
A17	[illegible]	[illegible]
A18	[illegible]	[illegible]
A19	[illegible]	[illegible]
A20	[illegible]	[illegible]
A21	[illegible]	[illegible]
A22	[illegible]	[illegible]
A23	[illegible]	[illegible]
B1	[illegible]	[illegible]
B2	[illegible]	[illegible]
B3	[illegible]	[illegible]
B4	[illegible]	[illegible]
C1	[illegible]	[illegible]
C2	[illegible]	[illegible]
C3	[illegible]	[illegible]
C4	[illegible]	[illegible]
D1	[illegible]	[illegible]
D2	[illegible]	[illegible]
D3	[illegible]	[illegible]
D4	[illegible]	[illegible]
E1	[illegible]	[illegible]
E2	[illegible]	[illegible]
E3	[illegible]	[illegible]
E4	[illegible]	[illegible]
F1	[illegible]	[illegible]
F2	[illegible]	[illegible]
F3	[illegible]	[illegible]
F4	[illegible]	[illegible]

TABLE 3b – VOLUME OF EXCAVATION

AREA	SQ. FT.	VOLUME
A	13,827	1024 CY
B	221	33 CY
C	180	9 CY
D	100	9 CY
E	141	17 CY
F	432	32 CY
TOTAL EXCAVATION VOLUME		1110 CY

GRAPHIC SCALE

10' 0 10' 20' 30'

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-140HVD-03-022

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2093 Mod. Ref No.: SDG No.: SL2093

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2093-01A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E3J5949F.D/E3J5949R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 10/04/2012

Extraction: (Type) SONC Date Extracted: 10/04/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/04/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	210	P
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2093 Mod. Ref No.: SDG No.: SL2093

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68536	74		74		90		103				0
02	LCS-68536	80		79		96		110				0
03	CDE-OU1-140H VD-03-022	68		69		82		96				0
04	CDE-OU1-1000 GAR-RW1-021	0	D	0	D	0	D	0	D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

 SW846

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2093 Mod. Ref No.: SDG No.: SL2093

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 07/05/2012 07/06/2012

Instrument ID: E3

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 4.225 DCB: 13.747

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605Z3	E3J3340R.D	7/6/2012	2:17	4.224	13.749
29	AR16603AZ	E3J5942R.D	10/4/2012	10:37	4.234	13.757
30	AR12543AZ	E3J5943R.D	10/4/2012	10:56	4.228	13.737
31	MB-68536	E3J5947R.D	10/4/2012	14:52	4.235	13.767
32	LCS-68536	E3J5948R.D	10/4/2012	15:11	4.234	13.764
33	CDE-OU1-140H VD-03-022	E3J5949R.D	10/4/2012	15:30	4.232	13.744
34	CDE-OU1-1000 GAR-RW1-021	E3J5952R.D	10/4/2012	16:42	*	*
35	AR16603ZA	E3J5954R.D	10/4/2012	17:19	4.219	13.703
36	AR12543ZA	E3J5955R.D	10/4/2012	17:39	4.218	13.703

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/03/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? — TEMP BLANK INCLUDED.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/03/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/03/12

☒ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☒	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☒	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☒	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☒	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☒	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☒	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☒	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☒	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:_____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	ERIC TSCHUDI		10/03/12
CQC Systems Manager			10/3/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: WEDNESDAY 10/03/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/03/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/03/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: OVERCAST. 72°F HUMID. LIGHT RAIN AT TIMES.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: PROPER PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION

Description of Chemical Data Acquisition Work Performed: NONE

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE — SAMPLES SHIPPED VIA FEDEX TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken):

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON PROJ. MGR.
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL DUBILIER SUPERFUND
Location: 333 HAMILTON BLVD. S. PLAINFIELD, State: NJ
Sampler(s): E-TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs +1262, 1268	Temp							
	140HVD-03-022	10/03/12	1505	G	SO		1			X								
	1000GAR-RW1-021	10/03/12	1450	G	SO		1			X								
	Temp Blank										X							

☒ E-mail to ~~EDD~~ ETSCHUDI@SEVENSON.COM
• KLICKFIELD@SEVENSON.COM
• ANDVAK@SEVENSON.COM
~~EDD Format~~

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI [signature]	FED EX	10/03/12	1800

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

FedEx Shipment Receipt

Address Information

Ship to:
Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI
028861784
US
4017323400

Ship from:
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ
07080
US
9087695301

Shipment Information:
Tracking no.: 799114060569
Ship date: 10/03/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

PCB SAMPLING
1000 GAR / 140 HUD. AVE.

10/03/12

(25)

10/03/12

1000 GARIBALDI

1450 COLLECT ONE 8 OZ SOIL JAR FROM 1' BLS WITHIN RIGHT OF WAY IN FRONT OF RESIDENCE AT 1000 GARIBALDI AS PER DIRECTION OF DIEGO GARCIA, EPA RPM. PRESENT ARE: E. TSCHUDI, K. LICKFIELD, P. NOVAK, P. SINGH (LABOR) OF SEVENSON. P. NEJAND, USACE.

WEATHER IS FULLY OVERCAST MIST/FOG, 73°F. P. SINGH DIGS HOLE 1' BLS AT EDGE OF SIDEWALK BETWEEN SIDEWALK AND STREET. USE CLEAN STAINLESS STEEL TROWEL, TO COLLECT SOIL SAMPLE:

CDE-OU1-1000GAR-RW1-021

SAMPLE TO BE ANALYZED FOR TOTAL PCBs + AROCLORS 1262 AND 1268.

SAMPLE TO BE SHIPPED TO MITKEM LAB - SEE LAB INFO AT BULLET ON PREVIOUS PAGE OF THIS LOG BOOK, P. 24.

1505 COLLECT PCB SOIL SAMPLE IN BACK YARD OF 140 HARVARD AVE. SAMPLE COLLECTED WITHIN AREA 3 - SEE SAMPLE MAP ON P. 7 OF THIS LOG BOOK. SAMPLE COLLECTED WITHIN ACTIVE EXCAVATION AT A DEPTH OF APPROX. 1' BLS TO 2' BLS. SAMPLE FROM 12"-24" BLS.

[signature] 10/03/12. "Rite in the Rain"

10/03/12 PCB SAMPLING - SOIL
140 HARVARD

WEATHER: 72°F FOGGY MIST.

(26)

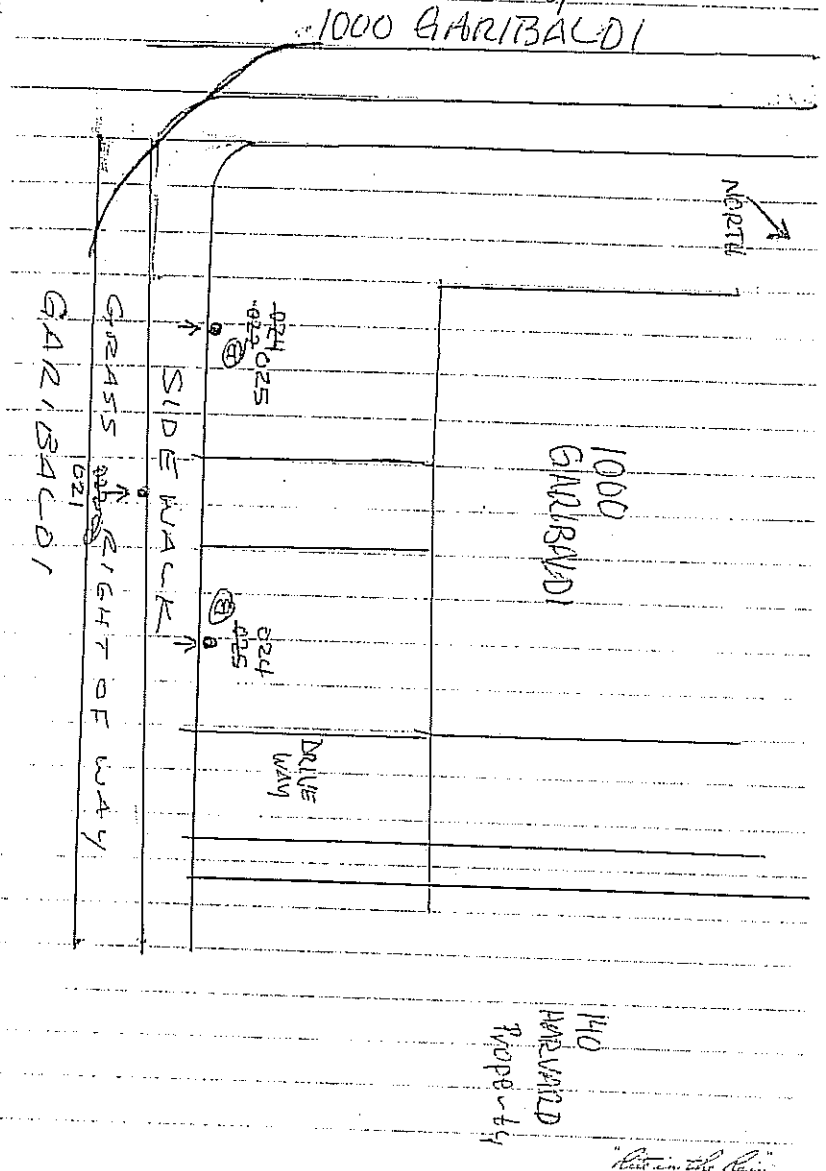
CONTINUED FROM P. 25. SOIL SAMPLE COLLECTED AT THE DIRECTION OF K. LICKFIELD AND D. GARCIA. SAMPLE ID: CDE-001-140HVD-03-022. SAMPLE WILL BE ANALYED FOR TOTAL PCBs PLUS AROCLORS 1262 AND 1268. SEE P. ~~25~~ 24 FOR LAB INFO. SAMPLE TIME: 1505, 8 oz JAR (AMBER). TWO SAMPLES ON COC FOR SHIPMENT TO LAB. DOUBLE BAGGED, WITH ICE, IN COOLER. SAMPLE AT 140 HARVARD AVE. COLLECTED WITHIN AREA 3 - AT A POINT 35' FROM BACK OF PROPERTY LINE WITH 1000 GARIBALDI, AND 15' IN FROM THE EDGE OF THE SIDEWALK. A WOOD STAKE MARKS THE LOCATION TO BE LOCATED BY PROF. SURVEY - LAYOUT INC.

[signature] 10/03/12

10/09/12

(27)

Sample location Map



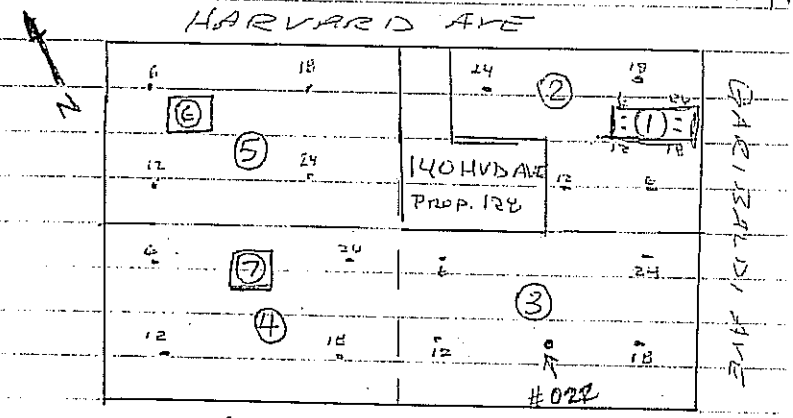
SUMMARY: 7/18/12 (7)

140 HARVARD AVE

~~1400~~ 1330 PARTLY CLOUDY, HUMID 96°F.

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ 07080 (PROPERTY 128).

INFORMED HOMEOWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 ~~7/18/12~~ 1500 ~~1515~~	CD-WC-140HVD-01-001
2	7/24/12 ~~7/18/12~~ 1550 ~~1650~~	CD-WC-140HVD-02-002
3	7/24/12 ~~7/23/12~~ 1330 ~~1430~~	CD-WC-140HVD-03-003
4	7/24/12 ~~7/23/12~~ 1400 ~~1600~~	CD-WC-140HVD-04-004
5	7/24/12 1430 ~~0915~~	CD-WC-140HVD-05-005
6	7/24/12	0950	CD-WC-140HVD-06-006
7	7/24/12	1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

7/18/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/13/2012

TRANSMITTAL NO.: 01450A-124

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
11	Final Sample #024 - 1000 Garibaldi Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample passed criteria for PCB's at 0.28 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
28-Oct-12 22:43

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2133
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2133-01	CDE-OU1-1000-GAR-FYR-024	Soil	09-Oct-12 15:15	10-Oct-12 09:41
~~L2133-02~~	~~CDE-OU1-1000-GAR-FYL-025~~	~~Soil~~	~~09-Oct-12 13:30~~	~~10-Oct-12 09:41~~
~~L2133-03~~	~~CDE-OU1-1-10-HVD-01-027~~	~~Soil~~	~~09-Oct-12 17:20~~	~~10-Oct-12 09:41~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-1000-GAR-FYR-024

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2133 Mod. Ref No.: SDG No.: SL2133

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2133-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6198F.D/E3J6198R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/10/2012

Extraction: (Type) SONC Date Extracted: 10/10/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/11/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	91	P
11096-82-5	Aroclor-1260	190	
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2133 Mod. Ref No.: SDG No.: SL2133

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68627	80	82	84	107			0
02	LCS-68627	71	69	86	109			0
03	LCSD-68627	64	62	85	108			0
04	CDE-OU1-1000 -GAR-FYR-024	68	69	74	90			0
05	CDE-OU1-140- HVD-01-027	76	66	89	93			0
06	CDE-OU1-1000 -GAR-FYL-025	72	63	92	92			0

QC LIMITS

TCX = Tetrachloro-m-xylene (34-147)

DCB = Decachlorobiphenyl (60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/09/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY, 52°F - MIST - LIGHT RAIN.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS REVIEWED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT PROPERTY #128. BACKFILL AT PROP. #128.

Description of Chemical Data Acquisition Work Performed: SOIL SAMPLE COLLECTION AT 1000 GARIBALDI AND 140 HARVARD AVE. RESIDENCES.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 10/09/12 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☒ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☐	☐	☒	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI, SSHO		10/09/12
CQC Systems Manager			10-9-12

(28)

10/09/12 1000 GARIBALDI PCB Sampling.

1500 - BEGIN SAMPLING EVENT TO COLLECT 2 SOIL SAMPLES FROM FRONT YARD OF 1000 GARIBALDI RESIDENCE. SAMPLE ID: WILL BE AS FOLLOWS:

- CDE-OUI-1000GAR-FYR-024

THIS SAMPLE IS TO BE COLLECT AT A DEPTH OF 1 FOOT BELOW SURFACE: THE FYR DESIGNATION MEANS FRONT YARD RIGHT. AS YOU FACE THE HOUSE FROM GARIBALDI, THE SAMPLE LOCATION IS IN THE FRONT YARD, TO THE RIGHT OF THE RESIDENT'S WALKWAY. SEE SAMPLE LOCATION MAP ON PREVIOUS PAGE TO IDENTIFY SAMPLE LOCATIONS.

- CDE-OUI-1000GAR-FYL-025.

SAME REFERENCE AS ABOVE, WITH FYL MEANING FRONT YARD LEFT. SEE MAP.

1515 COLLECT CDE-OUI-1000GAR-FYR-024 AT 12" BLS. FOR PCB ONLY ANALYSIS. USED CLEAN TROWEL TO FILL 8OZ AMBER.

1530 COLLECT CDE-OUI-1000GAR-FYL-025. SAME AS ABOVE. SHIP TO MITKEM LAB. SEE P. 24. For Lab Info.

Eric Tonnel. weather: Cloudy 52°F. misty Rain.

DIRECTED TO SAMPLE BY EPA / DEGOLGARCIA.

10/09/12 (29)

140 HARVARD SOIL SAMPLES

1640 GOING TO COLLECT ADDITIONAL SOIL SAMPLES AT 140 HARVARD AVE PROPERTY, WITHIN AREA 1. THIS IS THE AREA APPROX 12'x20' IN SIZE NEAR THE SIDEWALK AT ONE END, AND EXTENDING LENGTHWISE TOWARD THE HOUSE.

I, E. TSCHUDI, HAVE BEEN INSTRUCTED BY P. NOVAK AND P. NEJAND, USACE VIA D. GARCIA, EPA TO COLLECT 2 SAMPLES. ONE TO BE SENT FOR FULL WASTE CHARACTERIZATION, AND THE OTHER TO BE SENT FOR PCB ONLY (24 DAY).

SEE SAMPLE LOCATION MAP ON PAGE 7 TO SEE REFERENCE TO AREA 1 AT 140 HARVARD AVE.

1715 COLLECT SOIL SAMPLE ID:

- CDE-WO-140HVD-01-026

THE FOLLOWING ANALYSIS: TCLP VOC, TCLP SVOC, TCLP PESTICIDES AND HERBICIDES, TCLP METALS, PCBs, Ph, IGNITIBILITY, REACTIVE CYANIDE, REACTIVE SULFIDE.

1720 COLLECT SOIL SAMPLE ID:

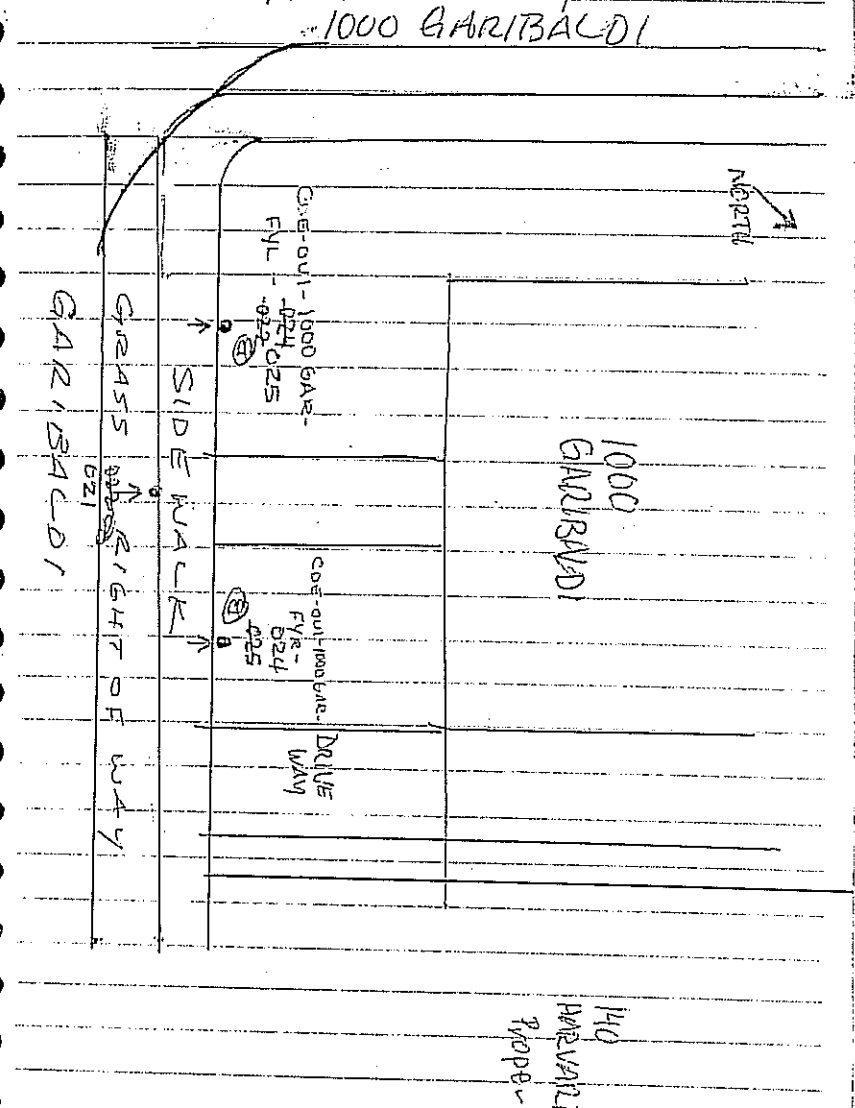
- CDE-OUI-140HVD-01-027 FOR PCBs ONLY INCLUDING ADDITIONAL AROCLORS 1262 AND 1268.

10/09/12

10/09/12

(27)

Sample location Map



Ear Toolmel. 10/09/12

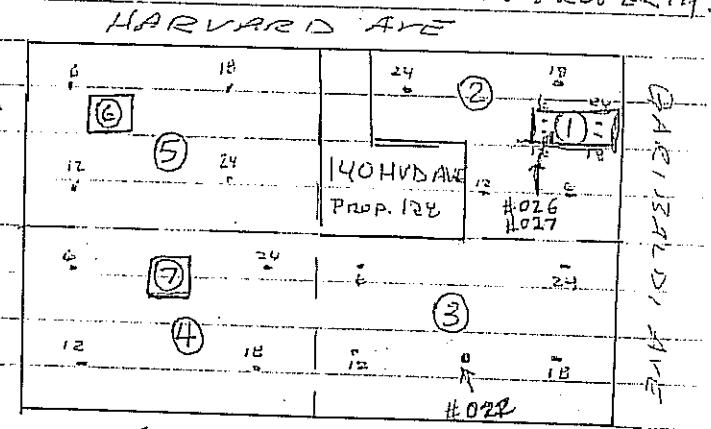
SUMMARY: 7/18/12 (7)

140 HARVARD AVE

~~1100~~ 1330 PARTLY CLOUDY, HUMID 96°F.

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ 07080 (PROPERTY 128).

INFORMED HOME OWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 ~~7/18/12~~ 1500 ~~1515~~	CD-WC-140HVD-01-001
2	7/24/12 ~~7/18/12~~ 1550 ~~1650~~	CD-WC-140HVD-02-002
3	7/24/12 ~~7/23/12~~ 1330 ~~1450~~	CD-WC-140HVD-03-003
4	7/24/12 ~~7/23/12~~ 1400 ~~1600~~	CD-WC-140HVD-04-004
5	7/24/12 1430 ~~915~~	CD-WC-140HVD-05-005
6	7/24/12	0950	CD-WC-140HVD-06-006
7	7/24/12	1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

7/18/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms			X
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

Swanson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/09/12

Subject: COC FOR SOIL SAMPLES

Pages: 2

Comments:

TALK TO YOU TOMORROW!

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 5 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001 RQN:

Project No.: G278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. ETSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBs	TCLP METALS	RETCYANIDE RE. SULFIDE	PH/IGNITIBILITY	PCBs ONLY + 1262 AND 1268	
	CDE-WC-140																	
	HVD-01-026	10/09/12	1715	SG	50	1	2			X	X	X	X	X	X	X		
	CDE-DU1-1000																	
	GAR-FYR-024	10/09/12	1515	G	50		1											
	CDE-DU1-1000																X	
	GAR-FYL-025	10/09/12	1530	G	50		1											
	CDE-DU1-1400																X	
	HVD-01-027	10/09/12	1720	G	50		1											
																	X	

☐ E-mail to: ETSCHUDI@SEVENSON.COM
EDD Format

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

FED EX

10/09/12 8000

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201207100025

Ship Date: 09OCT12
ActWgt: 25.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 10 OCT A1
PRIORITY OVERNIGHT

TRK# 7991 5613 8577
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799156138577
Ship date: 10/09/2012
Estimated shipping charges: 37.90

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 5 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

Q278-
P.O. No.: 9001 RQN:

Project No.: Q278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. ETSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

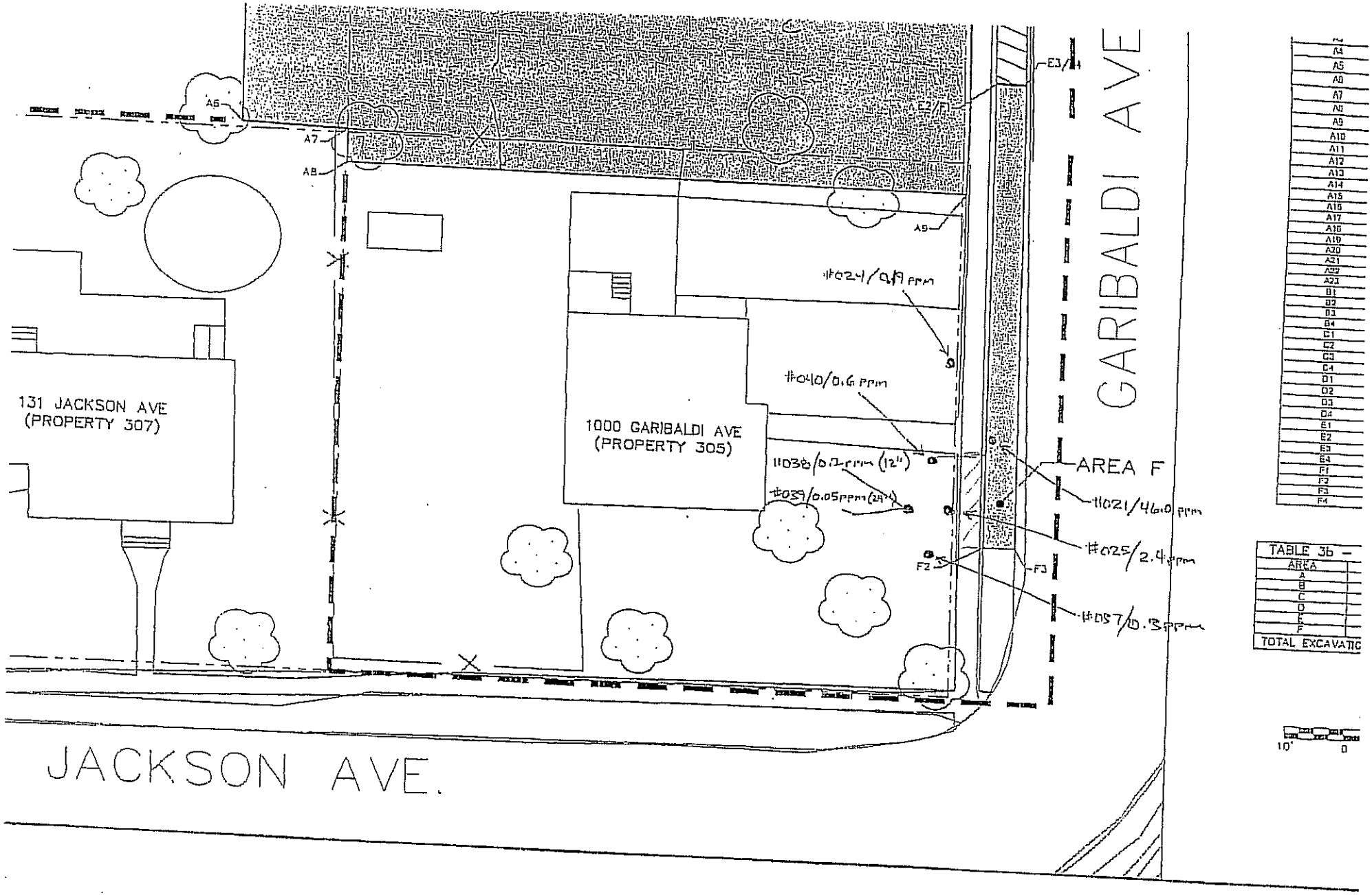
Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBS	TCLP METALS	REF. CYANIDE	REF. SULFIDE	PH/IGNITIBILITY	PCBS ONLY + 1262 AND 1268
	CDE-WC-140																	
	HVD-01-026	10/09/12	1715	G	SO	1	2			X	X	X	X	X	X	X		
	CDE-DUI-1000																	
	GAR-FYR-024	10/09/12	1515	G	SO		1											
	CDE-DUI-1000																	
	GAR-FYL-025	10/09/12	1530	G	SO		1										X	
	CDE-DUI-140																	
	HVD-01-027	10/09/12	1720	G	SO		1										X	
																	X	

☐ E-mail to EP ETSCHUDI@SEVENSON.COM
EDD Format

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

FED EX

10/09/12 2000



GARIBALDI AVE
JACKSON AVE.
131 JACKSON AVE
(PROPERTY 307)
1000 GARIBALDI AVE
(PROPERTY 305)
AREA F
#024/0.19 ppm
#040/0.6 ppm
#038/0.2 ppm (12")
#039/0.05 ppm (24")
#021/46.0 ppm
#025/2.4 ppm
#057/0.3 ppm
A6
A7
A8
A9
E2/F1
E3/F4
F2
F3
TABLE 3b
AREA
A
B
C
D
E
F
TOTAL EXCAVATIO
10'
0

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/13/2012

TRANSMITTAL NO.: 01450A-125

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
12	Info Sample #025 - 1000 Garibaldi Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 1.7 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
28-Oct-12 22:43

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: L2133
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2133-01~~	~~CDE-OU1-1000-GAR-FYR-024~~	~~Soil~~	~~09-Oct-12 15:15~~	~~10-Oct-12 09:41~~
L2133-02	CDE-OU1-1000-GAR-FYL-025	Soil	09-Oct-12 15:30	10-Oct-12 09:41
~~L2133-03~~	~~CDE-OU1-140-HVD-01-027~~	~~Soil~~	~~09-Oct-12 17:20~~	~~10-Oct-12 09:41~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-1000-GAR -FYL-025

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2133 Mod. Ref No.: SDG No.: SL2133

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2133-02A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6216F.D/E3J6216R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/10/2012

Extraction: (Type) SONC Date Extracted: 10/10/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/11/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	720	P
11096-82-5	Aroclor-1260	1000	
37324-23-5	Aroclor-1262	200	U
11100-14-4	Aroclor-1268	200	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2133 Mod. Ref No.: SDG No.: SL2133

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68627	80	82	84	107			0
02	LCS-68627	71	69	86	109			0
03	LCSD-68627	64	62	85	108			0
04	CDE-OU1-1000 -GAR-FYR-024	68	69	74	90			0
05	CDE-OU1-140- HVD-01-027	76	66	89	93			0
06	CDE-OU1-1000 -GAR-FYL-025	72	63	92	92			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som141.10.27.A

Page 1 of 1 SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/09/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY, 52°F - MIST - LIGHT RAIN.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS REVIEWED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT PROPERTY #128. BACKFILL AT PROP. #128.

Description of Chemical Data Acquisition Work Performed: SOIL SAMPLE COLLECTION AT 1000 GARIBALDI AND 140 HARVARD AVE. RESIDENCES.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/09/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☒ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☐	☐	☒	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI, SSHO		10/09/12
CQC Systems Manager			10-9-12

(28)

10/09/12 1000 GARIBALDI PCB Sampling.

1500 - BEGIN SAMPLING EVENT TO COLLECT 2 SOIL SAMPLES FROM FRONT YARD OF 1000 GARIBALDI RESIDENCE. SAMPLE ID's WILL BE AS FOLLOWS:

- CDE-OUI-1000GAR-FYR-024

THIS SAMPLE IS TO BE COLLECT AT A DEPTH OF 1 FOOT BELOW SURFACE. THE FYR DESIGNATION MEANS FRONT YARD RIGHT. AS YOU FACE THE HOUSE FROM GARIBALDI, THE SAMPLE LOCATION IS IN THE FRONT YARD, TO THE RIGHT OF THE RESIDENT'S WALKWAY. SEE SAMPLE LOCATION MAP ON PREVIOUS PAGE TO IDENTIFY SAMPLE LOCATIONS.

- CDE-OUI-1000GAR-FYL-025.

SAME REFERENCE AS ABOVE, WITH FYL MEANING FRONT YARD LEFT. SEE MAP.

1515 COLLECT CDE-OUI-1000GAR-FYR-024 AT 12" BLS. FOR PCB ONLY ANALYSIS. USED CLEAN TROWEL TO FILL 8OZ AMBER.

1530 COLLECT CDE-OUI-1000GAR-FYL-025. SAME AS ABOVE. SHIP TO MITKEM LAB. SEE P. 24. FOR LAB INFO.

Eric Tonnel. weather: cloudy 52°F windy rain.

DIRECTED TO SAMPLE BY EPA/OREGOLGARCO.

10/09/12 (29)

140 HARVARD SOIL SAMPLES

1640 GOING TO COLLECT ADDITIONAL SOIL SAMPLES AT 140 HARVARD AVE PROPERTY, WITHIN AREA 1. THIS IS THE AREA APPROX 12'x20' IN SIZE NEAR THE SIDEWALK AT ONE END, AND EXTENDING LENGTHWISE TOWARD THE HOUSE.

I, E. TSCHUDI, HAVE BEEN INSTRUCTED BY P. NOVAK AND P. NEJAND, USACE VIA D. GARCIA, EPA TO COLLECT 2 SAMPLES. ONE TO BE SENT FOR FULL WASTE CHARACTERIZATION, AND THE OTHER TO BE SENT FOR PCB ONLY (24 TAT). SEE SAMPLE LOCATION MAP ON PAGE 7 TO SEE REFERENCE TO AREA 1 AT 140 HARVARD AVE.

1715 COLLECT SOIL SAMPLE ID:

- CDE-WC-140HVD-01-026

THE FOLLOWING ANALYSIS: TCLP VOC, TCLP SVOC, TCLP PESTICIDES AND HERBICIDES, TCLP METALS, PCBs, Ph, IGNITIBILITY, REACTIVE CYANIDE, REACTIVE SULFIDE.

1720 COLLECT SOIL SAMPLE ID:

- CDE-OUI-140HVD-01-027 FOR PCBs ONLY INCLUDING ADDITIONAL AROCLORS 1262 AND 1268.

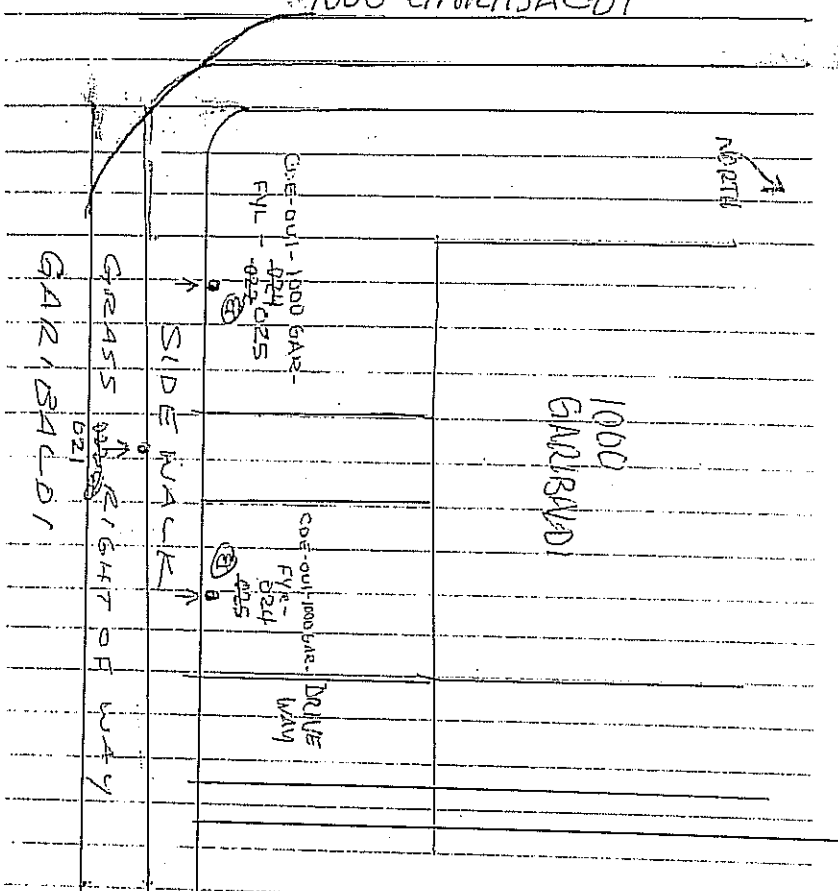
Eric Tonnel 10/09/12

10/09/12

(27)

Sample location Map

1000 GARIBALDI



140
HARVARD
Property

Ern Toulouse. 10/09/12

SUMMARY:

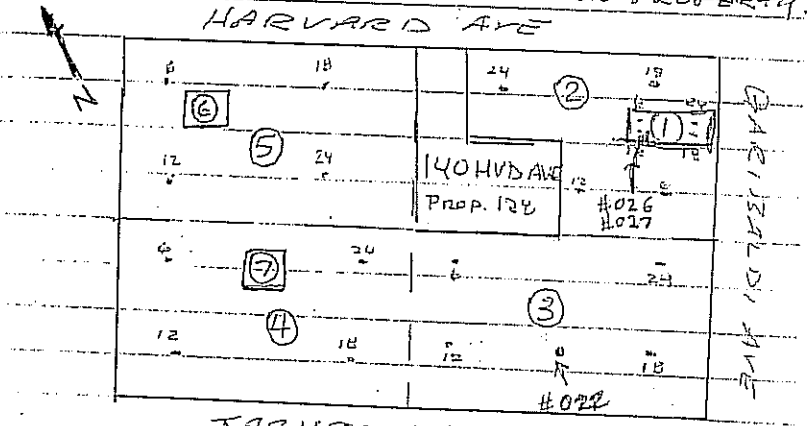
7/18/12 (7)

140 HARVARD AVE

~~1100~~ 1330 PARTLY CLOUDY, HUMID 96°F

E. JSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ 07080. (PROPERTY 128)

INFORMED HOMEOWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 ~~7/18/12~~ 1500 ~~1515~~	CD-WC-140HVD-01-001
2	7/24/12 ~~7/18/12~~ 1550 ~~1650~~	CD-WC-140HVD-02-002
3	7/24/12 ~~7/23/12~~ 1330 ~~1450~~	CD-WC-140HVD-03-003
4	7/24/12 ~~7/23/12~~ 1400 ~~1600~~	CD-WC-140HVD-04-004
5	7/24/12 ~~0915~~ 1430	CD-WC-140HVD-05-005
6	7/24/12	0950	CD-WC-140HVD-06-006
7	7/24/12	1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

Tim Tomlinson 7/18/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms			X
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

Severson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/09/12

Subject: COC FOR SOIL SAMPLES

Pages: 2

Comments:

TALK TO YOU TOMORROW!

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 5 DAY
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
833 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001
RQN:

Project No.: Q278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ETSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

W=Drinking Water GW=Groundwater WW=Wastewater
=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBs	TCLP METALS	RE: CYANIDE RE: SULFIDE	PH/IGNITIBILITY	PCBs ONLY + 1262 AND 1268	
	CDE-WC-140																	
	HVD-01-026	10/09/12	1715	SO	SO	1	2			X	X	X	X	X	X	X		
	CDE-DU1-1000																	
	GAR-FYR-024	10/09/12	1515	G	SO		1											
	CDE-DU1-1000																X	
	GAR-FYL-025	10/09/12	1530	G	SO		1											
	CDE-DU1-140																	
	HVD-01-027	10/09/12	1720	G	SO		1										X	
																	X	

E-mail to ETSCHUDI@SEVENSON.COM
D Format

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

FED EX

10/09/12 2000

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx. Express

J12201207180325

Ship Date: 09OCT12
ActWgt: 25.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 10 OCT A1
PRIORITY OVERNIGHT

TRK# 7991 5613 8577
0201

ZA NCOA

02886
RI-US
PVD

515G1/BCCD/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799156138577
Ship date: 10/09/2012
Estimated shipping charges: 37.90

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SPECTRUM ANALYTICAL INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 5 DAY
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001 RQN:

Project No.: Q278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ETSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBs	TCLP METALS	RE: CYANIDE RG. SULFIDE	PH/IGNITIBILITY	PCBs ONLY + 1262 AND 1268	
	CDE-WC-140																	
	HVD-01-026	10/09/12	1715	G	SO	1	2			X	X	X	X	X	X	X		
	CDE-DU1-1000																	
	GAR-FYR-024	10/09/12	1515	G	SO		1										X	
	CDE-DU1-1000																	
	GAR-FYL-025	10/09/12	1530	G	SO		1										X	
	CDE-DU1-140																	
	HVD-01-027	10/09/12	1720	G	SO		1										X	

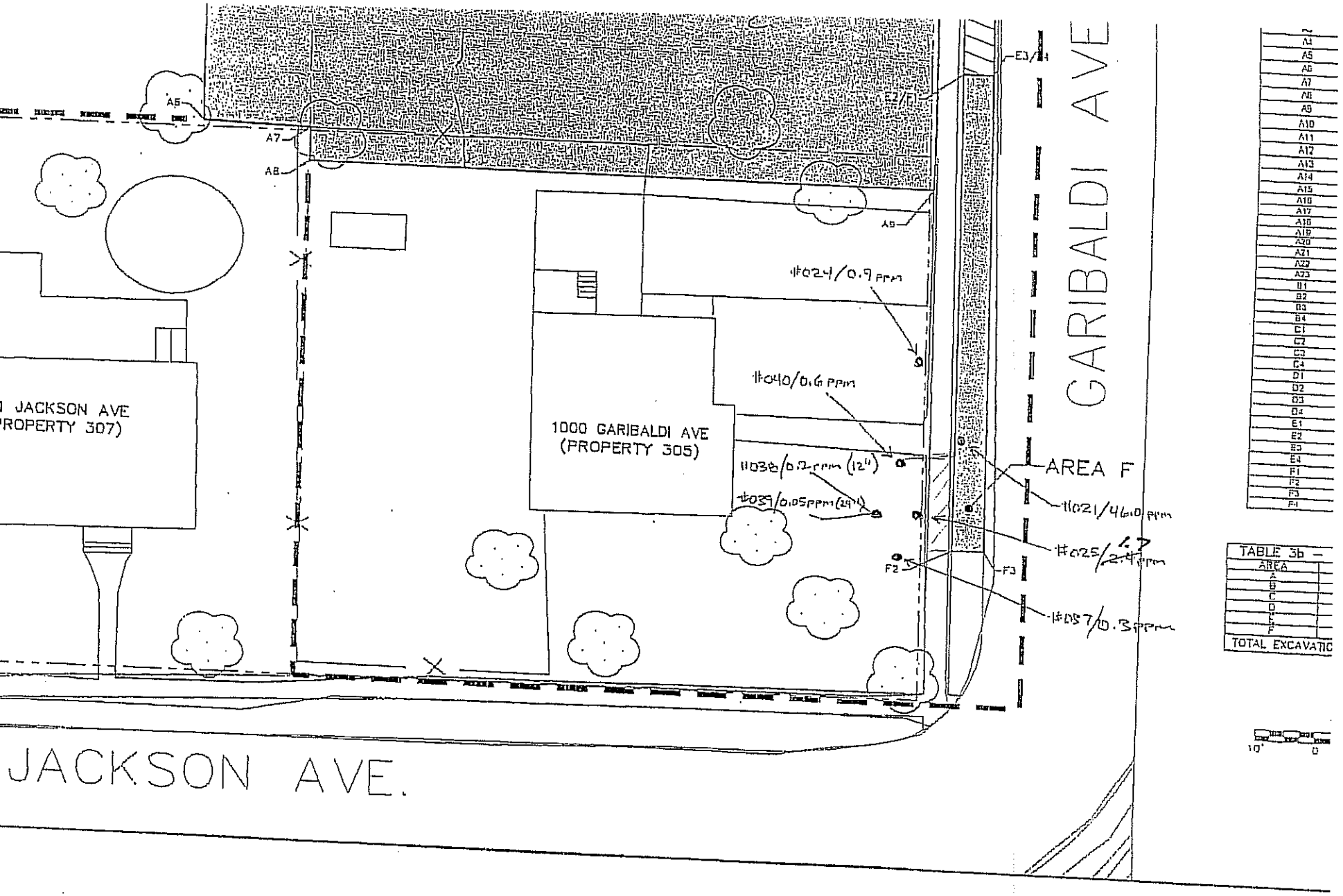
QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

E-mail to ETSCHUDI@SEVENSON.COM
DD Format

FED EX

10/09/12 8000


JACKSON AVE
(PROPERTY 307)
1000 GARIBALDI AVE
(PROPERTY 305)
GARIBALDI AVE
JACKSON AVE.
AREA F
A5
A7
A8
A9
E2/E1
E3/E4
#024/0.9 ppm
#040/0.6 ppm
#038/0.2 ppm (12")
#039/0.05ppm (24")
#021/46.0 ppm
#025/2.4 ppm
#037/0.3ppm
F2
F3
TABLE 3b
AREA
TOTAL EXCAVATIO
10'
0

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/13/2012

TRANSMITTAL NO.: 01450A-126

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
13	Info Sample #026 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 2.90 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
23-Oct-12 22:04

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2134
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2134-01	CDE-WC-140-HVD-01-026	Soil	09-Oct-12 17:15	10-Oct-12 09:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L2134

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL_WC, G278
Comments: N/A

Case:
SDG:
PO: G2789001

HC Due: 10/22/12
Fax Due: 10/17/12
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	PMoist	/					A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW1010_S	/					A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW6010_W	/ TCLP_METALS				Y	A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW7.3.3.2_S	/ REACTIVITY					A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW7.3.4.2_S	/ REACTIVITY					A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW7470	/ TCLP_METALS					A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW8081_W	/ TCLP				Y	A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW8082_S	/					A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW8151_W	/ TCLP				Y	A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW8270_W	/ TCLP				Y	A7
L2134-01A	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW9045_S	/					A7
L2134-01B	CDE-WC-140-HVD-01-026	10/09/2012 17:15	10/10/2012	Soil	SW8260_W	/ TCLP_VOA				Y	VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

2 10/10/2012 21:24 Lab Client Rep: Agnes R Huntley

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-WC-140-HVD-0 1-026

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2134 Mod. Ref No.: SDG No.: SL2134

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2134-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I0538.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/10/2012

% Moisture: not dec. Date Analyzed: 10/16/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl chloride	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
67-66-3	Chloroform	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-90-7	Chlorobenzene	5.0	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-WC-140-HVD-01-026

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2134 Mod. Ref No.: SDG No.: SL2134

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2134-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: S3I2247.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 10/10/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 10/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 10/12/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	33	U
95-48-7	2-Methylphenol	33	U
106-44-5	4-Methylphenol	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
87-68-3	Hexachlorobutadiene	33	U
88-06-2	2,4,6-Trichlorophenol	33	U
95-95-4	2,4,5-Trichlorophenol	67	U
121-14-2	2,4-Dinitrotoluene	33	U
118-74-1	Hexachlorobenzene	33	U
87-86-5	Pentachlorophenol	67	U
110-86-1	Pyridine	67	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-WC-140-HVD-0
1-026

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2134 Mod. Ref No.: SDG No.: SL2134

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2134-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: E5J1877F.D/E5J1877R.D

% Moisture: Decanted: (Y/N) Date Received: 10/10/2012

Extraction: (Type) SEPF Date Extracted: 10/12/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/15/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
58-89-9	gamma-BHC (Lindane)	0.17	U
76-44-8	Heptachlor	0.17	U
1024-57-3	Heptachlor epoxide	0.17	U
72-20-8	Endrin	0.33	U
72-43-5	Methoxychlor	1.7	U
8001-35-2	Toxaphene	17	U
12789-03-6	Chlordane (technical)	8.3	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-WC-140-HVD-01-026

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2134 Mod. Ref No.: SDG No.: SL2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2134-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6280F.D/E3J6280R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/10/2012

Extraction: (Type) SONC Date Extracted: 10/10/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	390	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	390	U
53469-21-9	Aroclor-1242	390	U
12672-29-6	Aroclor-1248	390	U
11097-69-1	Aroclor-1254	2900	
11096-82-5	Aroclor-1260	390	U

1 - FORM I HERB

CHLORINATED HERBICIDE ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-WC-140-HVD-01-026

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2134 Mod. Ref No.: SDG No.: SL2134

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2134-01A

Sample wt/vol: 300 (g/mL) ML Lab File ID: E4G8962F.D/E4G8962R.D

% Moisture: Decanted: (Y/N) Date Received: 10/10/2012

Extraction: (Type) SEPF Date Extracted: 10/12/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
94-75-7	2,4-D	3.3	U
93-72-1	2,4,5-TP (Silvex)	0.33	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-WC-140-HVD-01-026

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2134

Matrix (soil/water): WATER Lab Sample ID: L2134-01

Level (low/med): MED Date Received: 10/10/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	764			P
7440-43-9	Cadmium	0.89	U		P
7440-47-3	Chromium	0.64	U		P
7439-92-1	Lead	4.2	U		P
7439-97-6	Mercury	0.028	U		CV
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P

Comments:

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/09/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY, 52°F - MIST - LIGHT RAIN.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS REVIEWED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT PROPERTY #128. BACKFILL AT PROP. #128.

Description of Chemical Data Acquisition Work Performed: SOIL SAMPLE COLLECTION AT 1000 GARIBALDI AND 140 HARVARD AVE. RESIDENCES.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/09/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled, prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☐	☐	☒	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI, SSHO		10/09/12
CQC Systems Manager			10-9-12

(28)

10/09/12 1000 GARIBALDI PCB Sampling.

1500 - BEGIN SAMPLING EVENT TO COLLECT 2 SOIL SAMPLES FROM FRONT YARD OF 1000 GARIBALDI RESIDENCE. SAMPLE IDs WILL BE AS FOLLOWS:

DIRECTED TO SAMPLE BY EPA, DIEGO GARCIA.

- CDE-OUI-1000GAR-FYR-024

THIS SAMPLE IS TO BE COLLECT AT A DEPTH OF 1 FOOT BELOW SURFACE. THE FYR DESIGNATION MEANS FRONT YARD RIGHT. AS YOU FACE THE HOUSE FROM GARIBALDI, THE SAMPLE LOCATION IS IN THE FRONT YARD, TO THE RIGHT OF THE RESIDENT'S WALKWAY. SEE SAMPLE LOCATION MAP ON PREVIOUS PAGE TO IDENTIFY SAMPLE LOCATIONS.

- CDE-OUI-1000GAR-FYL-025.

SAME REFERENCE AS ABOVE, WITH FYL MEANING FRONT YARD LEFT. SEE MAP.

1515 COLLECT CDE-OUI-1000GAR-FYR-024 AT 12" BLS. FOR PCB ONLY ANALYSIS. USED CLEAN TROWEL TO FILL 8 OZ AMBER.

1530 COLLECT CDE-OUI-1000GAR-FYL-025. SAME AS ABOVE. SHIP TO MITKEM LAB. SEE P. 24. For Lab info.

[signature] weather: cloudy 52°F. misty rain.

10/09/12 (29)

140 HARVARD SOIL SAMPLES

1640 GOING TO COLLECT ADDITIONAL SOIL SAMPLES AT 140 HARVARD AVE PROPERTY, WITHIN AREA 1. THIS IS THE AREA APPROX 12' x 20' IN SIZE NEAR THE SIDEWALK AT ONE END, AND EXTENDING LENGTHWISE TOWARD THE HOUSE.

I, E. TSCHUDI, HAVE BEEN INSTRUCTED BY P. NOVAK AND P. NEJAND, USACE VIA D. GARCIA, EPA TO COLLECT 2 SAMPLES. ONE TO BE SENT FOR FULL WASTE CHARACTERIZATION, AND THE OTHER TO BE SENT FOR PCB ONLY (24 TAT). SEE SAMPLE LOCATION MAP ON PAGE 7 TO SEE REFERENCE TO AREA 1 AT 140 HARVARD AVE.

1715 COLLECT SOIL SAMPLE ID:

- CDE-WC-140HVD-01-026

THE FOLLOWING ANALYSIS: TCLP VOC, TCLP SVOC, TCLP PESTICIDES AND HERRICIDES, TCLP METALS, PCBs, Ph, IGNITIBILITY, REACTIVE CYANIDE, REACTIVE SULFIDE.

1720 COLLECT SOIL SAMPLE ID:

- CDE-OUI-140HVD-01-027 FOR PCBs ONLY INCLUDING ADDITIONAL AROCLORS 1262 AND 1268.

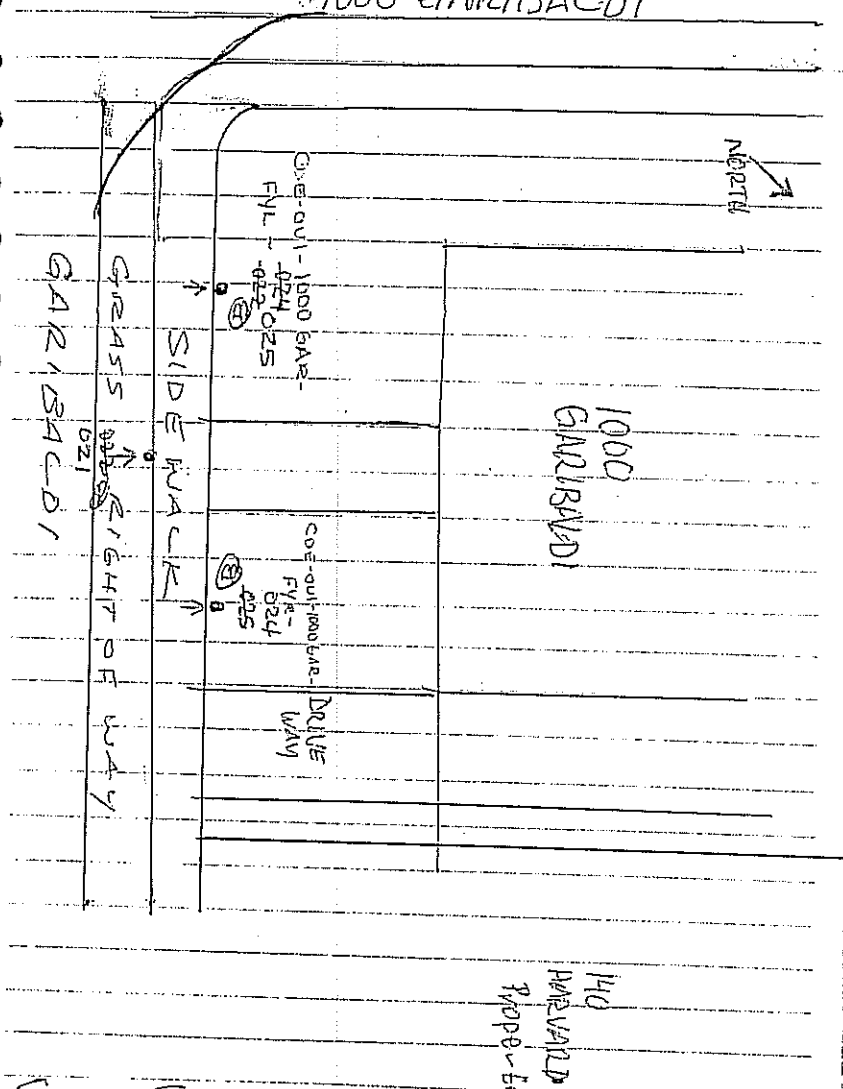
[signature] 10/09/12

10/09/12

(27)

Sample location Map

1000 GARIBALDI



Ellen Garibaldi. 10/09/12

SUMMARY:

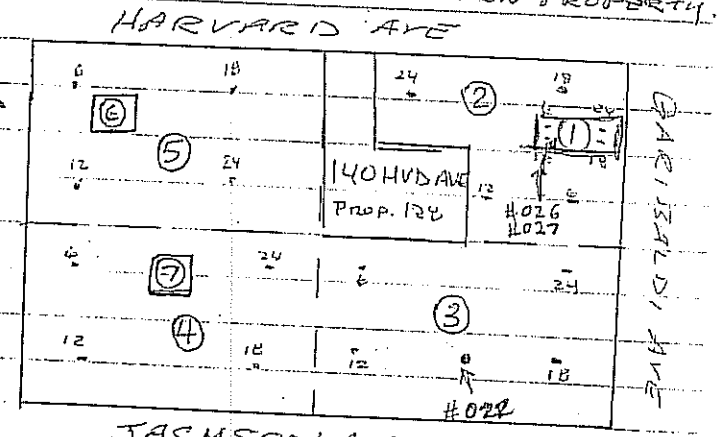
7/18/12 (7)

140 HARVARD AVE

~~1400~~ 1330 PARTLY CLOUDY, HUMID 96°F

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ 07080 (PROPERTY 128)

INFORMED HOMEOWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 1500 ~~7/18/12 1515~~	CD-WC-140HVD-01-001
2	7/24/12 1550 ~~7/18/12 1650~~	CD-WC-140HVD-02-002
3	7/24/12 1370 ~~7/23/12 1450~~	CD-WC-140HVD-03-003
4	7/24/12 1400 ~~7/23/12 1600~~	CD-WC-140HVD-04-004
5	7/24/12 1430 ~~0915~~	CD-WC-140HVD-05-005
6	7/24/12 0950	CD-WC-140HVD-06-006
7	7/24/12 1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

Tim Tomlinson 7/18/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms			X
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/09/12

Subject: COC FOR SOIL SAMPLES

Pages: 2

Comments:

TALK TO YOU TOMORROW!

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR 5 DAY
TAT- Indicate Date Needed: _____
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
833 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001 RQN: _____

Project No.: Q278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= _____ 10= _____ 11= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBs	TCLP METALS	RETCYANIDE REG. SULFIDE	PH/IGNITIBILITY	PCBs ONLY + 1262 AND 1268	
	CDE-WC-140																	
	HVD-01-026	10/09/12	1715	G	SO	1	2			X	X	X	X	X	X	X		
	CDE-DU1-1000																	
	GAR-FYR-024	10/09/12	1515	G	SO		1											
	CDE-DU1-1000																	
	GAR-FYL-025	10/09/12	1530	G	SO		1										X	
	CDE-DU1-140																	
	HVD-01-027	10/09/12	1720	G	SO		1										X	
																	X	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

☐ E-mail to ET ETSCHUDI@SEVENSON.COM
EDD Format _____

FED EX

10/09/12 2000

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1220120718032S

Ship Date: 09OCT12
ActWgt: 25.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400
BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 10 OCT A1
PRIORITY OVERNIGHT

TRK# 7991 5613 8577
0201

ZA NCOA

02886
RI-US
PVD

515G1/8CCB/A44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:
Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI
028861784
US
4017323400

Ship from:
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ
07080
US
9087695301

Shipment Information:
Tracking no.: 799156138577
Ship date: 10/09/2012
Estimated shipping charges: 37.90

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR 5DAY
TAT- Indicate Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
833 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001 RQN:

Project No.: Q278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ETSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBS	TCLP METALS	RET. CYANIDE	RE. SULFIDE	PH/IGNITIBILITY	PCBS ONLY + 1262 AND 1268	
	CDE-WC-140																		
	HVD-01-026	10/09/12	1715	SG	SO	1	2			X	X	X	X	X	X	X			
	CDE-DU1-1000																		
	GAR-FYR-024	10/09/12	1515	G	SO		1											X	
	CDE-DU1-1000																		
	GAR-FYL-025	10/09/12	1530	G	SO		1											X	
	CDE-DU1-140																		
	HVD-01-027	10/09/12	1720	G	SO		1											X	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

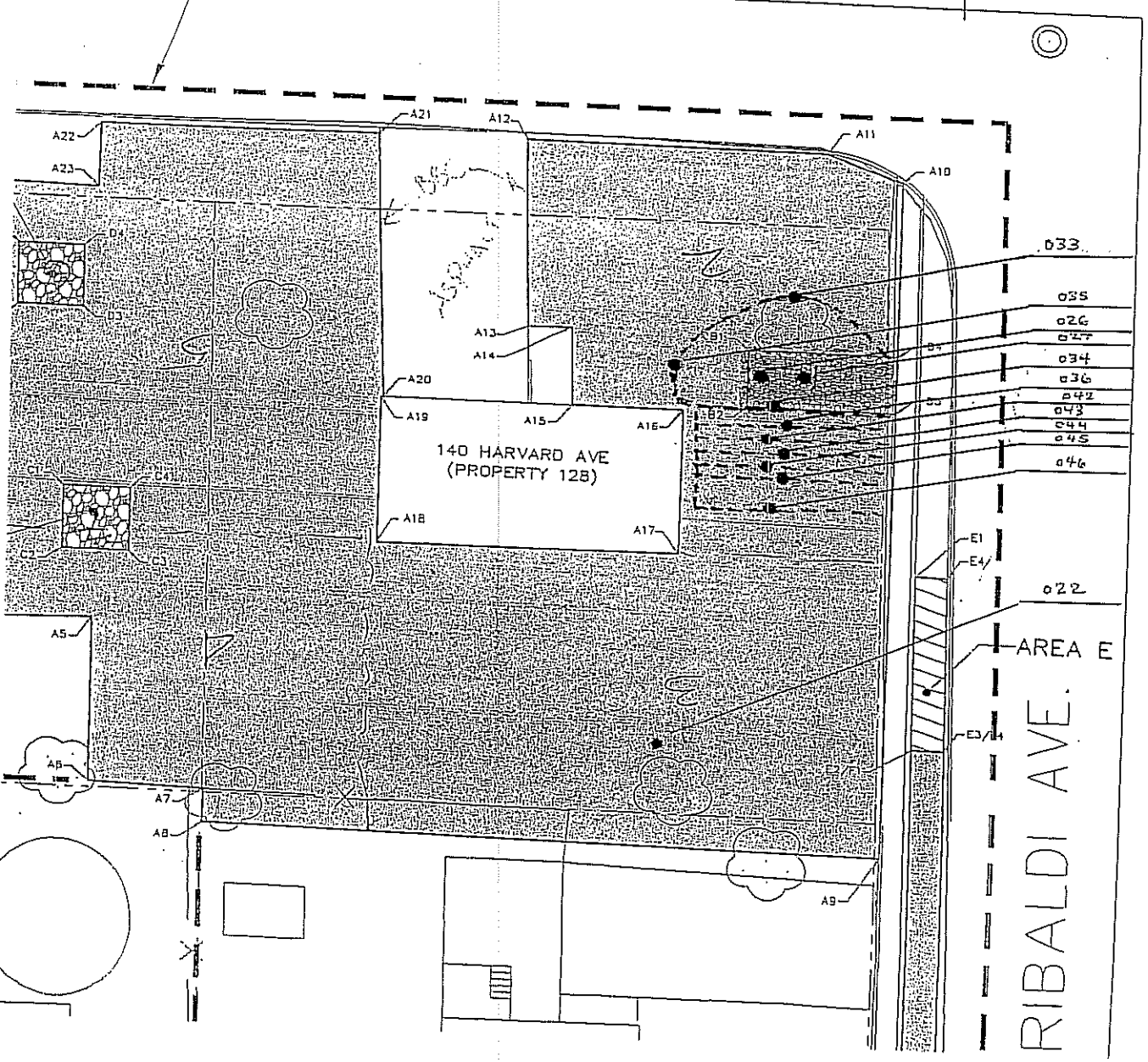
☐ E-mail to ETSCHUDI@SEVENSON.COM
EDD Format

FED EX

10/09/12 2000

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.9715	515352.4339
A2	633330.5101	515323.0369
A3	633315.7367	515343.3714
A4	633299.5400	515330.1000
A5	633288.4800	515346.1100
A6	633283.2055	515326.4325
A7	633253.8732	515342.2716
A8	633240.1230	515338.0560
A9	633188.0220	515420.1990
A10	633280.3050	515487.3504
A11	633290.2811	515480.3043
A12	633318.3941	515444.0152
A13	633291.5100	515427.4000
A14	633287.0660	515432.7719
A15	633278.5985	515425.0675
A16	633266.9622	515438.3356
A17	633247.6415	515424.2431
A18	633273.3066	515387.0800
A19	633293.1524	515402.2706
A20	633292.9485	515402.6594
A21	633329.1900	515425.0000
A22	633353.4056	515302.9260
A23	633345.2200	515306.0100
B1	633270.3723	515452.4759
B2	633262.2022	515440.5981
B3	633249.2510	515461.4403
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	633298.4764	515347.6016

REV
No

PROJECT NAME

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/13/2012

TRANSMITTAL NO.: 01450A-127

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO. W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 01450A

PROJECT TITLE AND LOCATION 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
14	Info Sample #027 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 2.40 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
28-Oct-12 22:43

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2133
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2133-01~~	~~CDE-OU1-1000-GAR-PEL-024~~	~~Soil~~	~~09-Oct-12 15:15~~	~~10-Oct-12 09:41~~
~~L2133-02~~	~~CDE-OU1-1000-GAR-PYL-025~~	~~Soil~~	~~09-Oct-12 15:30~~	~~10-Oct-12 09:41~~
L2133-03	CDE-OU1-140-HVD-01-027	Soil	09-Oct-12 17:20	10-Oct-12 09:41

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140-HVD-01-027

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2133 Mod. Ref No.: SDG No.: SL2133

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2133-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6202F.D/E3J6202R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/10/2012

Extraction: (Type) SONC Date Extracted: 10/10/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/11/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	390	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	390	U
53469-21-9	Aroclor-1242	390	U
12672-29-6	Aroclor-1248	390	U
11097-69-1	Aroclor-1254	2400	
11096-82-5	Aroclor-1260	390	U
37324-23-5	Aroclor-1262	390	U
11100-14-4	Aroclor-1268	390	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2133 Mod. Ref No.: SDG No.: SL2133

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68627	80	82	84	107			0
02	LCS-68627	71	69	86	109			0
03	LCSD-68627	64	62	85	108			0
04	CDE-OU1-1000 -GAR-FYR-024	68	69	74	90			0
05	CDE-OU1-140-HVD-01-027	76	66	89	93			0
06	CDE-OU1-1000 -GAR-FYL-025	72	63	92	92			0

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

QC LIMITS

(34-147)

(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/09/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY, 52°F - MIST - LIGHT RAIN.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS REVIEWED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT PROPERTY #128. BACKFILL AT PROP. #128.

Description of Chemical Data Acquisition Work Performed: SOIL SAMPLE COLLECTION AT 1000 GARIBALDI AND 140 HARVARD AVE. RESIDENCES.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/09/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☐	☐	☒	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI, SSHO		10/09/12
CQC Systems Manager	Mike Cambray		10-9-12

(28)

10/09/12 1000 GARIBALDI PCB Sampling.

1500 - BEGIN SAMPLING EVENT TO COLLECT 2 SOIL SAMPLES FROM FRONT YARD OF 1000 GARIBALDI RESIDENCE. SAMPLE IDs WILL BE AS FOLLOWS:

DIRECTED TO SAMPLE BY EPA, DIEGO GARCIA.

- CDE-OUI-1000GAR-FYR-024

THIS SAMPLE IS TO BE COLLECT AT A DEPTH OF 1 FOOT BELOW SURFACE: THE FYR DESIGNATION MEANS FRONT YARD RIGHT. AS YOU FACE THE HOUSE FROM GARIBALDI, THE SAMPLE LOCATION IS IN THE FRONT YARD, TO THE RIGHT OF THE RESIDENT'S WALKWAY. SEE SAMPLE LOCATION MAP ON PREVIOUS PAGE TO IDENTIFY SAMPLE LOCATIONS.

- CDE-OUI-1000GAR-FYL-025.

SAME REFERENCE AS ABOVE, WITH FYL MEANING FRONT YARD LEFT. SEE MAP.

1515 COLLECT CDE-OUI-1000GAR-FYR-024 AT 12" BLS. FOR PCB ONLY ANALYSIS. USED CLEAN TROWEL TO FILL 8 OZ AMBER.

1530 COLLECT CDE-OUI-1000GAR-FYL-025. SAME AS ABOVE. SHIP TO MITKEM LAB. SEE P. 24. For Lab info.

[signature]. weather: Cloudy 52°F. misty Rain.

10/09/12 (29)

140 HARVARD SOIL SAMPLES

1640 GOING TO COLLECT ADDITIONAL SOIL SAMPLES AT 140 HARVARD AVE PROPERTY, WITH IN AREA 1. THIS IS THE AREA APPROX 12'x20' IN SIZE NEAR THE SIDEWALK AT ONE END, AND EXTENDING LENGTHWISE TOWARD THE HOUSE.

I, E. TSCHUDI, HAVE BEEN INSTRUCTED BY P. NOVAK AND P. NEJAND, USACE VIA D. GARCIA, EPA TO COLLECT 2 SAMPLES. ONE TO BE SENT FOR FULL WASTE CHARACTERIZATION, AND THE OTHER TO BE SENT FOR PCB ONLY (24 TAT). SEE SAMPLE LOCATION MAP ON PAGE 7 TO SEE REFERENCE TO AREA 1 AT 140 HARVARD AVE.

1715 COLLECT SOIL SAMPLE ID:

- CDE-WC-140HVD-01-026

THE FOLLOWING ANALYSIS: TCLP VOC, TCLP SVOC, TCLP PESTICIDES AND HERBICIDES, TCLP METALS, PCBs, Ph, IGNITIBILITY, REACTIVE CYANIDE, REACTIVE SULFIDE.

1720 COLLECT SOIL SAMPLE ID:

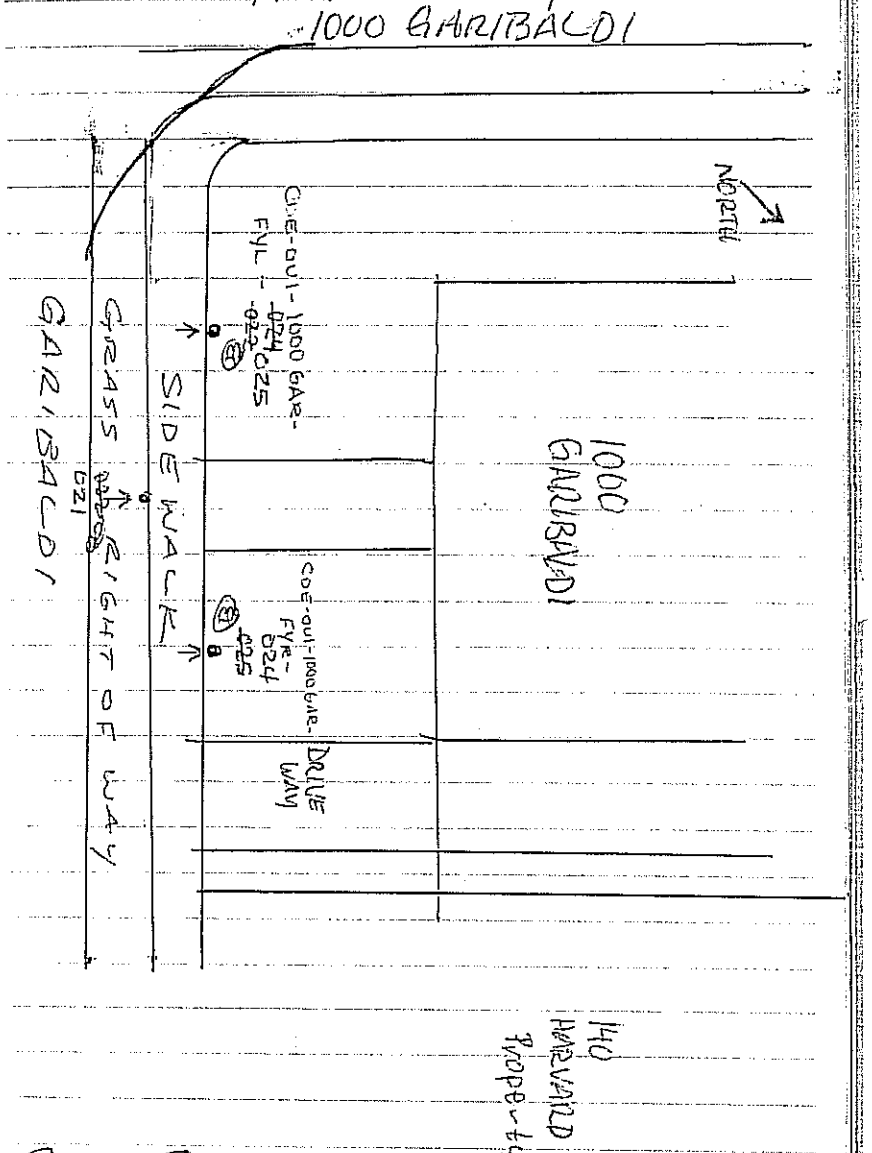
- CDE-OUI-140HVD-01-027 FOR PCBs ONLY INCLUDING ADDITIONAL AROCLORS 1262 AND 1268.

[signature] 10/09/12

10/09/12

(27)

Sample location Map



Ean Toulmel. 10/09/12 "Rite in the Rain"

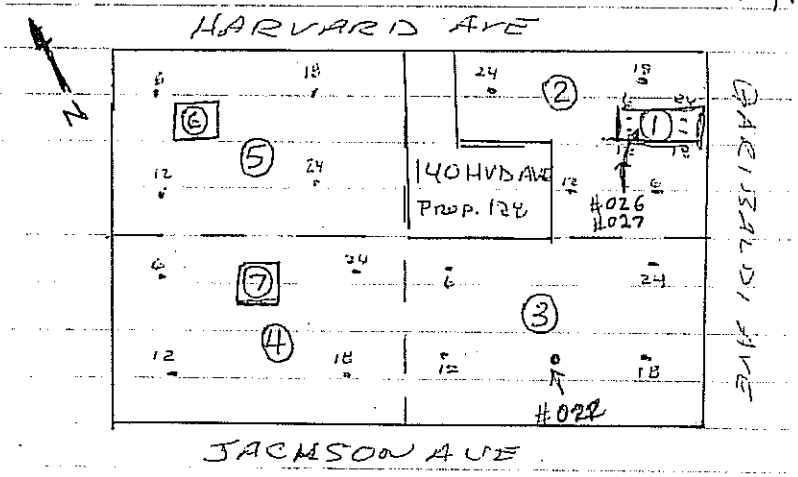
SUMMARY: 7/18/12 (7)

140 HARVARD AVE

~~1400~~ 1330 PARTLY CLOUDY, HUMID 96°F.

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ 07080 (PROPERTY 128)

INFORMED HOMEOWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME	SAMPLE CODE
1	7/24/12 ~~7/18/12~~ 1500 ~~1515~~	CD-WC-140HVD-01-001
2	7/24/12 ~~7/18/12~~ 1550 ~~1650~~	CD-WC-140HVD-02-002
3	7/24/12 ~~7/23/12~~ 1330 ~~1450~~	CD-WC-140HVD-03-003
4	7/24/12 ~~7/23/12~~ 1400 ~~1600~~	CD-WC-140HVD-04-004
5	7/24/12 ~~0915~~ 1430	CD-WC-140HVD-05-005
6	7/24/12	0950	CD-WC-140HVD-06-006
7	7/24/12	1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

Eric Tschudi 7/18/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/09/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms			X
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/09/12

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/09/12

Subject: COC FOR SOIL SAMPLES

Pages: 2

Comments:

TALK TO YOU TOMORROW!

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 5 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001 RQN:

Project No.: Q278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ETSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBS	TCLP METALS	REACTIVE CYANIDE RE. SULFIDE	PH/IGNITIBILITY	PCBs ONLY + 1262 AND 1268
	CDE-WC-140																
	HVD-01-026	10/09/12	1715	SG	SO	1	2			X	X	X	X	X	X	X	
	CDE-OU1-1000																
	GAR-FYR-024	10/09/12	1515	G	SO		1										X
	CDE-OU1-1000																
	GAR-FYL-025	10/09/12	1530	G	SO		1										X
	CDE-OU1-140																
	HVD-01-027	10/09/12	1720	G	SO		1										X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☐ E-mail to ETSCHUDI@SEVENSON.COM
EDD Format

FED EX 10/09/12 2000

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1220120718032S

Ship Date: 09OCT12
ActWgt: 25.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref# Sevenson
Invoice #
PO # Cornell
Dept #

WED - 10 OCT A1
PRIORITY OVERNIGHT

TRK# 7991 5613 8577
0201

ZA NCOA

02886
RI-US
PVD

515G1/SCCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799156138577
Ship date: 10/09/2012
Estimated shipping charges: 37.90

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 5 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: Q278-9001 RQN:

Project No.: G278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ETSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBs	TCLP METALS	RE: CYANIDE RE. SULFIDE	PH/IGNITIBILITY	PCBs ONLY + 1262 AND 1268		
	CDE-WC-140																		
	HVD-01-026	10/09/12	1715	~~SO~~ C	SO	1	2			X	X	X	X	X	X	X			
	CDE-OU1-1000																		
	GAR-FYR-024	10/09/12	1515	G	SO		1										X		
	CDE-OU1-1000																		
	GAR-FYL-025	10/09/12	1530	G	SO		1										X		
	CDE-OU1-140																		
	HVD-01-027	10/09/12	1720	G	SO		1										X		

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

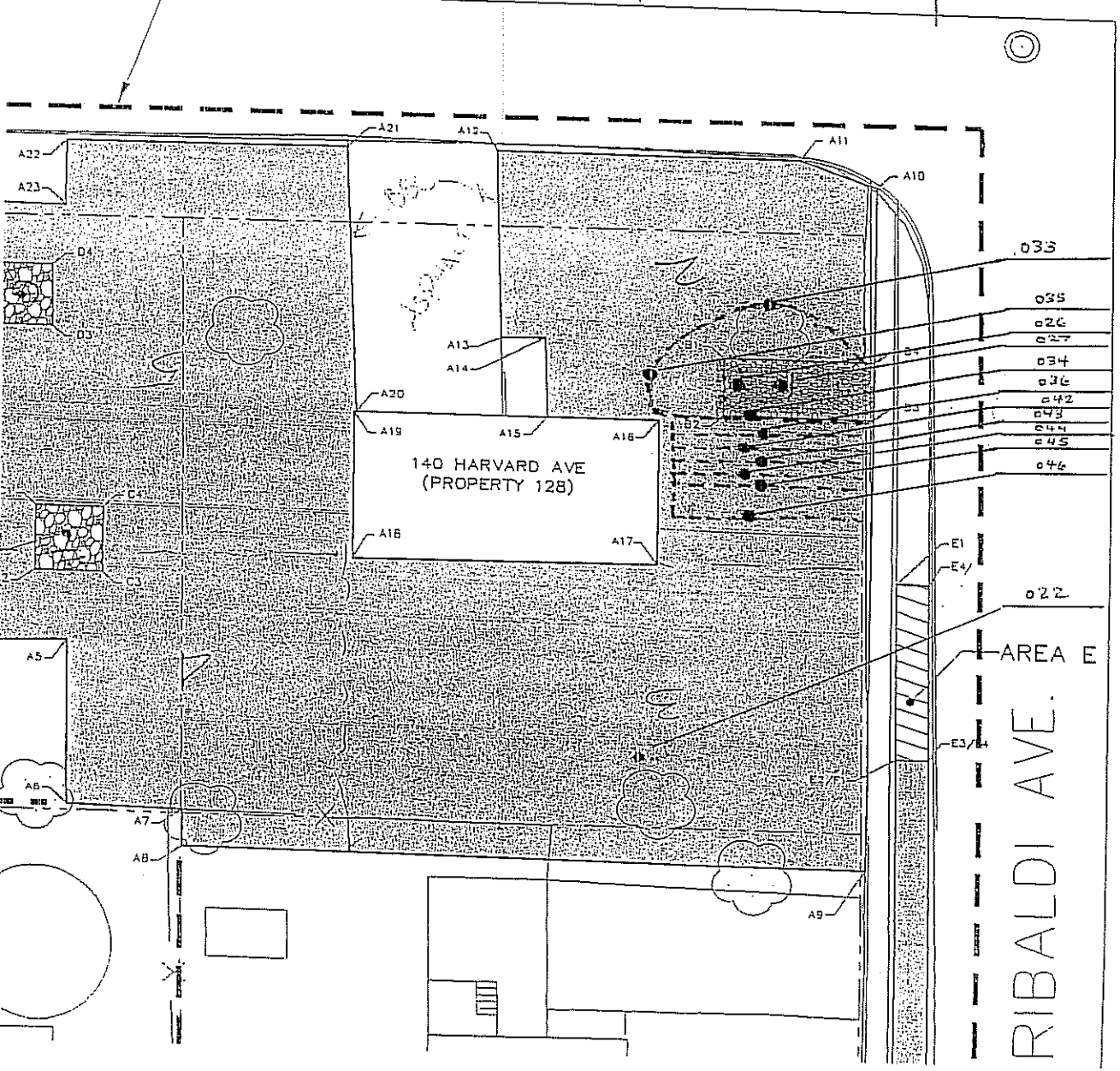
☐ E-mail to ~~EP~~ ETSCHUDI@SEVENSON.COM
EDD Format

[signature]	FED EX	10/09/12	2000

Condition upon receipt: ☐ ☐ Ambient ☐

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.0715	515352.4330
A2	633330.5101	515323.0369
A3	633315.7362	515343.3714
A4	633290.5400	515330.1000
A5	633288.4800	515345.1100
A6	633283.2055	515328.4225
A7	633252.6232	515342.2716
A8	633248.1220	515330.0560
A9	633180.0220	515420.1890
A10	633280.3050	515487.2504
A11	633290.2811	515480.3843
A12	633310.3941	515444.6152
A13	633291.5100	515427.4000
A14	633287.0660	515432.7710
A15	633278.5035	515425.0675
A16	633266.9622	515430.3356
A17	633247.5415	515424.7431
A18	633273.3006	515387.8800
A19	633293.1524	515402.2786
A20	633292.0485	515402.5504
A21	633329.1900	515420.0000
A22	633353.4050	515392.9260
A23	633345.2200	515386.8100
B1	633270.3723	515452.4759
B2	633262.2822	515446.5981
B3	633249.7510	515464.4403
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	633298.4764	515347.8016

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/13/2012

TRANSMITTAL NO.: 01450A-128

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
15	Info Sample #028 & #030 - 109 Arlington	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #028 failed criteria for PCB's at 24.0 ppm
Sample #030 failed criteria for PCB's at 1.2 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
31-Oct-12 00:07

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2162
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2162-01	CDE-OUI-109ARL-028	Soil	11-Oct-12 11:15	12-Oct-12 09:10
~~L2162-02~~	~~CDE-OUI-109ARL-029~~	~~Soil~~	~~11-Oct-12 11:25~~	~~12-Oct-12 09:10~~
L2162-03	CDE-OUI-109ARL-030	Soil	11-Oct-12 11:40	12-Oct-12 09:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OUI-109ARL-028

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2162 Mod. Ref No.: SDG No.: SL2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2162-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E3J6365F.D/E3J6365R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 10/12/2012

Extraction: (Type) SONC Date Extracted: 10/12/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/18/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 50.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1800	U
11104-28-2	Aroclor-1221	1800	U
11141-16-5	Aroclor-1232	1800	U
53469-21-9	Aroclor-1242	1800	U
12672-29-6	Aroclor-1248	1800	U
11097-69-1	Aroclor-1254	1800	U
11096-82-5	Aroclor-1260	1800	U
37324-23-5	Aroclor-1262	24000	
11100-14-4	Aroclor-1268	1800	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OUI-109ARL-030

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2162 Mod. Ref No.: SDG No.: SL2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2162-03A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E3J6392F.D/E3J6392R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 10/12/2012

Extraction: (Type) SONC Date Extracted: 10/12/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	370	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	370	U
11096-82-5	Aroclor-1260	370	
37324-23-5	Aroclor-1262	1200	
11100-14-4	Aroclor-1268	370	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2162 Mod. Ref No.: SDG No.: SL2162

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68709	94	107	96	102			0
02	LCS-68709	92	102	88	93			0
03	CDE-OUI-109A RL-028	0 D	0 D	0 D	0 D			4
04	CDE-OUI-109A RL-029	87	101	84	94			0
05	CDE-OUI-109A RL-030	84	96	95	109			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/11/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY, 50°F. WIND: 15-20 MPH.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS REVIEWED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL.

Description of Chemical Data Acquisition Work Performed: COLLECTED PCB SOIL SAMPLES AT BACK PROP. LINE OF 109 ARLINGTON PROPERTY. THIS AREA LINES UP WITH EXCAVATION AT THE BACK OF 108/112 DELMORE AVE.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/11/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/11/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

Date

10/11/12

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/11/12

☐ PREPARATORY PHASE

Yes	No	N/A		Comment
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

~~☒ INITIAL PHASE~~ 10/11/12 OR ☒ FOLLOW-UP PHASE

Yes	No	N/A		Comment
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☐	☐	☒	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
10/11/12 ☒	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI _____ 10/11/12
Name Signature Date

CQC Systems Manager _____ _____ 10-11-12
Name Signature Date

(30)

109 ARLINGTON
10/11/12 PCB SAMPLING

WEATHER: SUNNY - 50°F.

1100 E. TSCHUDI AND P. SINGH - LCHOR, ARRIVE AT 109 ARLINGTON TO COLLECT 3 SOIL SAMPLES ACROSS BACK PROPERTY LINE WITH 108 DEMORE. SEE SOIL SAMPLE LOCATION MAP ON P. 19 OF THIS LOGBOOK.

THE SAMPLE CODES ARE AS FOLLOWS:

- CDE-OUI-109ARL-028
- CDE-OUI-109ARL-029
- CDE-OUI-109ARL-030

P. SINGH BEGINS DIGGING WITH SHOVEL - CLEAN SHOVEL - AT SAMPLE LOCATION #028. SOIL MATERIAL FROM HOLE IS PLACED ON POLY SHEETING TO PREVENT GRASS LAWN FROM GETTING DIRTY. DIGS TO 12" BLS.

1115 - COLLECT SOIL SAMPLE: CDE-OUI-109ARL028, USING NEW-CLEAN HAND TROWEL. FILL 1-8oz GLASS JAR.

1125 - COLLECT SAMPLE FROM 12" DEEP HOLE AT #029 LOCATION - SAMPLE ID: CDE-OUI-109ARL-029

(31) ~~1130~~ 1140 - COLLECT SOIL SAMPLE FROM #030 LOCATION AT 12" BLS. SAMPLE ID: CDE-OUI-109ARL-030.

10/11/12

109 ARLINGTON
PCB SAMPLING.

(31) 10/11/12

(31) 1140 ~~1135~~ - P. SINGH BEGINS BACKFILLING HOLES OF SAMPLE LOCATIONS #028, #029 AND #030. USING SAME MATERIAL THAT WAS DUG UP FROM EACH HOLE. HAVING USED POLY SHEETING, THERE ARE NO REMNANTS OF SOIL IN THE GRASS. CLEAN FILL MATERIAL IS USED TO COVER THE SURFACE AREA OF THE SAMPLE LOCATIONS.

(31) 1145 ~~1140~~ E. TSCHUDI AND P. SINGH LEAVE 109 ARLINGTON PROPERT VIA SIDE GATE, SAME WAY WE ENTERED.

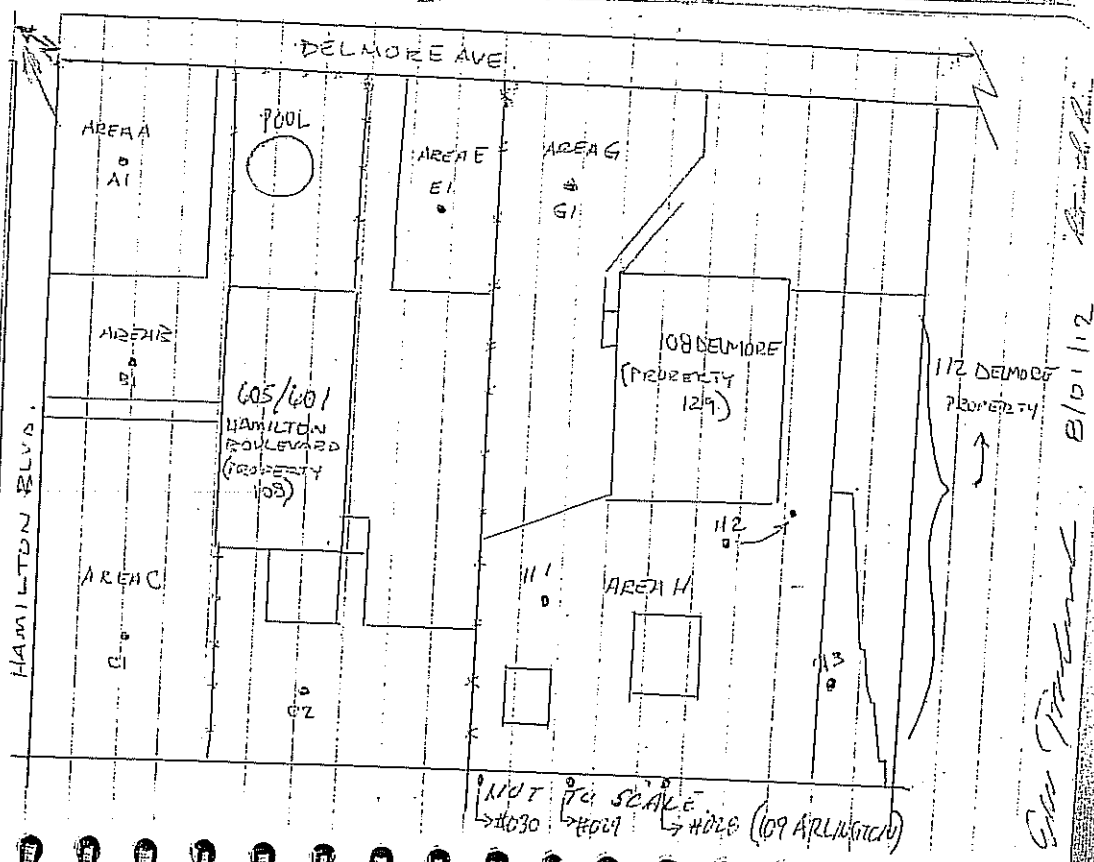
THE THREE SAMPLES - 3-8oz JARS, ARE TO SENT FOR TOTAL PCB ANALYSIS TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268. SAMPLES WILL BE SHIPPED ONICE, IN A COOLER TO MITKEM LABORATORIES 175 METRO CENTER BOULEVARD, WARICK, RI 02886-1755; PH: 401 732-3400, FAX: 401 732 3499. ~~SAMPLE~~ COC WILL IDENTIFY STANDARD TAT OF 5 DAYS AS PER D. GARCIA, EPA. THESE SAMPLE LOCATIONS WERE AGREED UPON BY P. NOVAK, SES, P. NETAND, USACE, AND D. GARCIA, EPA ON 10/10/12 IN A MEETING HELD IN THE USACE SITE OFFICE TRAILER.

10/11/12

(19)

8/01/12 WC SAMPLING
605/601 HAMILTON BLVD.
108/112 DELMORE AVE

SAMPLE LOCATION MAP



8/01/12

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/11/12

Subject: COC, FED EX AIRBILL, RECEIPT

Pages: 4

Comments:

PLEASE CALL WITH ANY QUESTIONS.

THANK YOU!

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5DAY
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: CDE-OU1	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs +1262/1268								
	109ARL-028	10/11/12	1115	G	SO			1		X								
	109ARL-029	10/11/12	1125	G	SO			1		X								
	109ARL-030	10/11/12	1140	G	SO			1		X								

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

☐ E-mail to ~~EMTS~~ ETSCHUDI@SEVENSON.COM
EDD Format

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI [signature]	FED EX	10/11/12	1800

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx. Express

J122012071100325

Ship Date: 11OCT12
ActWgt: 12.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 12 OCT A1
PRIORITY OVERNIGHT

TRK# 7991 7301 7866
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CCB/AA44

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:
Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI
028861784
US
4017323400

Ship from:
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ
07080
US
9087695301

Shipment Information:
Tracking no.: 799173017866
Ship date: 10/11/2012
Estimated shipping charges: 26.87

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 12 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TABLE 1b — VOLUME OF EXCAVATION		
AREA	SQ. FT.	VOLUME
A	1118	47 CY
B	625	16 CY
C	3000	57 CY
D	330	7 CY
E	200	20 CY
F	30	2 CY
G	750	14 CY
H	2570	141 CY
I	64	9 CY
TOTAL EXCAVATION VOLUME		366 CY

NOTES:

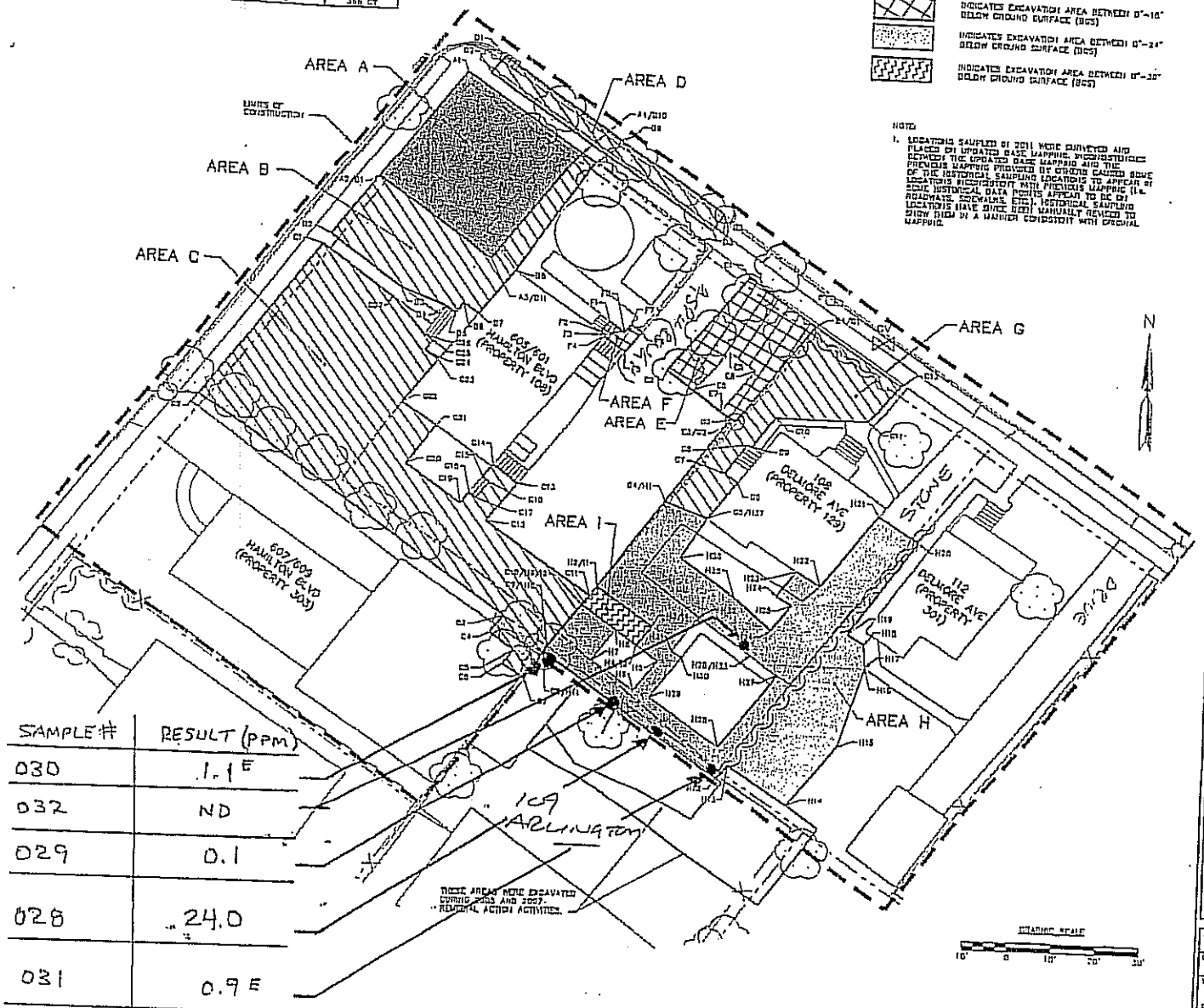
1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

LEGEND

- INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"-12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"-18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"-24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"-30" BELOW GROUND SURFACE (BGS)

NOTE:

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.



THESE AREAS WERE EXCAVATED DURING 2005 AND 2007 REMEDIAL ACTION ACTIVITIES.

SAMPLE #	RESULT (PPM)
030	1.1 E
032	ND
029	0.1
028	24.0
031	0.9 E

ARCADIS MALCOLM PIRNIE

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 108, 129, 301 & 303
EXCAVATION PLAN

JOB NO.:
CONTRACT NO.:
SHEET NAME: FIGURE 1A
DRAWN BY: R. IANICELI
DESIGNED BY: A. MASON
CHECKED BY: D. GIRARD
SHEET 2 OF 18
FILE NAME:
DATE: MAY 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/13/2012

TRANSMITTAL NO.: 01450A-129

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
16	Final Sample #029 - 109 Arlington Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample passed criteria for PCB's at 0.11 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
31-Oct-12 00:07

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2162
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~[illegible]~~	~~[illegible]~~	~~Soil~~	~~[illegible]~~	~~[illegible]~~
L2162-02	CDE-OU1-109ARL-029	Soil	11-Oct-12 11:25	12-Oct-12 09:10
~~[illegible]~~	~~CDE-OU1-109ARL-030~~	~~Soil~~	~~11-Oct-12 11:40~~	~~12-Oct-12 09:10~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OUI-109ARL-029

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2162 Mod. Ref No.: SDG No.: SL2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2162-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3J6366F.D/E3J6366R.D

% Moisture: 9.1 Decanted: (Y/N) N Date Received: 10/12/2012

Extraction: (Type) SONC Date Extracted: 10/12/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/18/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	110	P
11096-82-5	Aroclor-1260	36	
37324-23-5	Aroclor-1262	36	
11100-14-4	Aroclor-1268	36	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2162 Mod. Ref No.: SDG No.: SL2162

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68709	94		107		96		102				0
02	LCS-68709	92		102		88		93				0
03	CDE-OUI-109A RL-028	0	D	0	D	0	D	0	D			4
04	CDE-OUI-109A RL-029	87		101		84		94				0
05	CDE-OUI-109A RL-030	84		96		95		109				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/11/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY, 50°F. WIND: 15-20 MPH.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS REVIEWED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL.

Description of Chemical Data Acquisition Work Performed: COLLECTED PCB SOIL SAMPLES AT BACK PROP. LINE OF 109 ARLINGTON PROPERTY. THIS AREA LINES UP WITH EXCAVATION AT THE BACK OF 108/112 DELMORE AVE.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED TO MITKEM LABORATORIES.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/11/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/11/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP BLANK	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI, SSHO

[signature]

Date

10/11/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/11/12

☐ PREPARATORY PHASE

Yes	No	N/A		Comment
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

~~☒ INITIAL PHASE~~ 10/11/12 OR ☒ FOLLOW-UP PHASE

Yes	No	N/A		Comment
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☐	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?
☐	☐	☒	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?
☒	☐	☐	Were chain-of-custody forms completed per SAP?
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?
10/11/12 ☒	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?
☒	☐	☐	Were all destination laboratories notified of sample shipments?

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	10/11/12
CQC Systems Manager	[illegible]	[illegible]	10-11-12

(30)

109 ARLINGTON
10/11/12 PCB SAMPLING

WEATHER: SUNNY - 50°F.

1100 E. TSCHUDI AND P. SINGH - LABOR, ARRIVE AT 109 ARLINGTON TO COLLECT 3 SOIL SAMPLES ACROSS BACK PROPERTY LINE WITH 108 DEMORE. SEE SOIL SAMPLE LOCATION MAP ON P. 19 OF THIS LOGBOOK.

THE SAMPLE CODES ARE AS FOLLOWS:

- CDE-OUI-109ARL-028
- CDE-OUI-109ARL-029
- CDE-OUI-109ARL-030

P. SINGH BEGINS DIGGING WITH SHOVEL - CLEAN SHOVEL - AT SAMPLE LOCATION #028. SOIL MATERIAL FROM HOLE IS PLACED ON POLY SHEETING TO PREVENT GRASS LAWN FROM GETTING DIRTY. DIGS TO 12" BLS.

1115 - COLLECT SOIL SAMPLE: CDE-OUI-109ARL028, USING NEW-CLEAN HAND TROWEL. FILL 1-8oz GLASS JAR.

1125 - COLLECT SAMPLE FROM 12" DEEP HOLE AT #029 LOCATION - SAMPLE ID: CDE-OUI-109ARL-029

1130 - COLLECT SOIL SAMPLE FROM #030 LOCATION AT 12" BLS. SAMPLE ID: CDE-OUI-109ARL-030.

10/11/12

109 ARLINGTON
PCB SAMPLING.

(31)

10/11/12

1140 ~~1135~~ - P. SINGH BEGINS BACKFILLING HOLES OF SAMPLE LOCATIONS #028, #029 AND #030. USING SAME MATERIAL THAT WAS DUG UP FROM EACH HOLE. HAVING USED POLY SHEETING THERE ARE NO REMNANTS OF SOIL IN THE GRASS. CLEAN FILL MATERIAL IS USED TO COVER THE SURFACE AREA OF THE SAMPLE LOCATIONS.

1145 1140 E. TSCHUDI AND P. SINGH LEAVE 109 ARLINGTON PROPERTY VIA SIDE GATE, SAME WAY WE ENTERED.

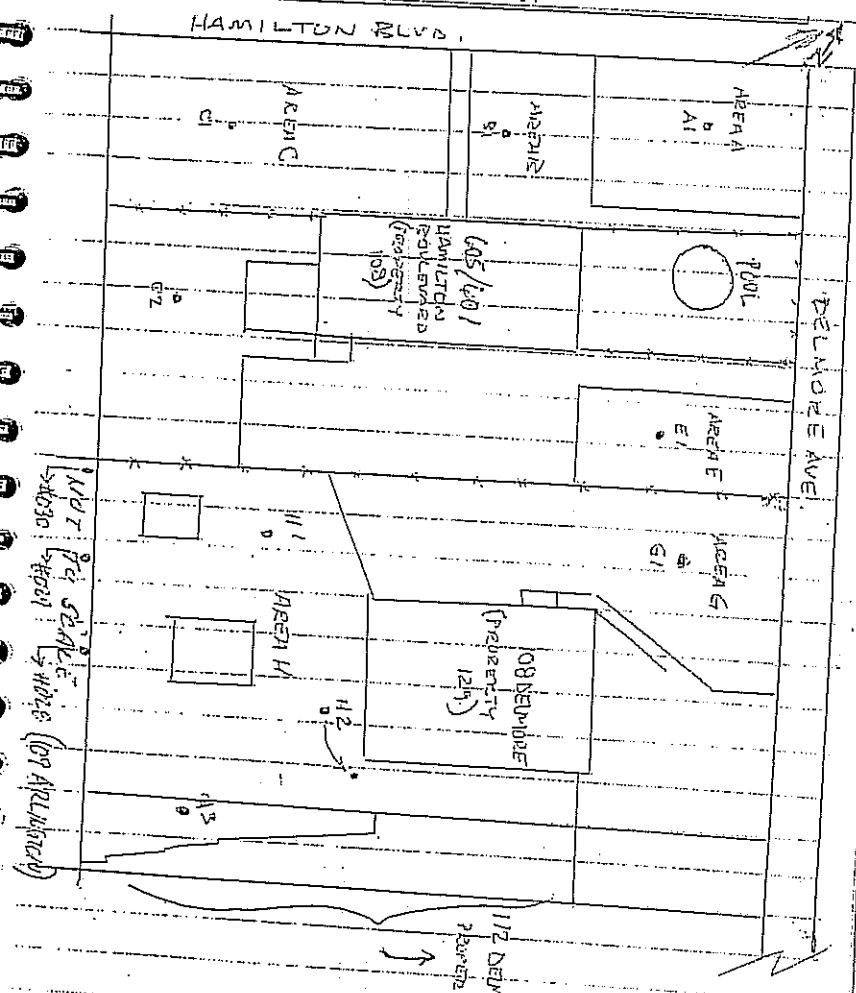
THE THREE SAMPLES - 3-8oz JARS, ARE TO SENT FOR TOTAL PCB ANALYSIS TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268. SAMPLES WILL BE SHIPPED ONISE, IN A COOLER TO MITKEM LABORATORIES 175 METRO CENTER BOULEVARD, WARICK, RI 02886-1755; PH: 401 732-3400, FAX: 401 732 3499. ~~SAMPLE~~ COC WILL IDENTIFY STANDARD TAT OF 5 DAYS AS PER D. GARCIA, EPA. THESE SAMPLE LOCATIONS WERE AGREED UPON BY P. NOVAK, SES, P. NETAND, USACE, AND D. GARCIA, EPA ON 10/10/12 IN A MEETING HELD IN THE USACE SITE OFFICE TRAILER.

10/11/12

8/01/12 WC SAMPLING
605/601 HAMILTON BLVD.
108/112 DELMORE AVE.

(19)

SAMPLE LOCATION MAP



8/01/12

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/11/12

Subject: COC, FED EX AIRBILL, RECEIPT

Pages: 4

Comments:

PLEASE CALL WITH ANY QUESTIONS.

THANK YOU!

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5DAY
All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5101

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-OU1)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262/1268									
	109ARL-028	10/11/12	1115	G	SO			1		X									
	109ARL-029	10/11/12	1125	G	SO			1		X									
	109ARL-030	10/11/12	1140	G	SO			1		X									

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

☐ E-mail to EMAIL ETSCHUDI@SEVENSON.COM
EDD Format

Relinquished by:	Received by:	Date	Time
ERIC TSCHUDI	FED EX	10/11/12	1800

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201207180325

Ship Date: 11OCT12
ActWgt: 12.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 12 OCT A1
PRIORITY OVERNIGHT

TRK# 7991 7301 7866
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CC8/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:
Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI
028861784
US
4017323400

Ship from:
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ
07080
US
9087695301

Shipment Information:
Tracking no.: 799173017866
Ship date: 10/11/2012
Estimated shipping charges: 26.87

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 12 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TABLE 1b – VOLUME OF EXCAVATION		
AREA	VOL. (CY)	VOLUME
A	1115	12 CY
B	615	14 CY
C	3010	51 CY
D	330	7 CY
E	240	18 CY
F	35	2 CY
G	715	14 CY
H	2510	181 CY
I	24	9 CY
TOTAL EXCAVATION VOLUME		308 CY

NOTES:

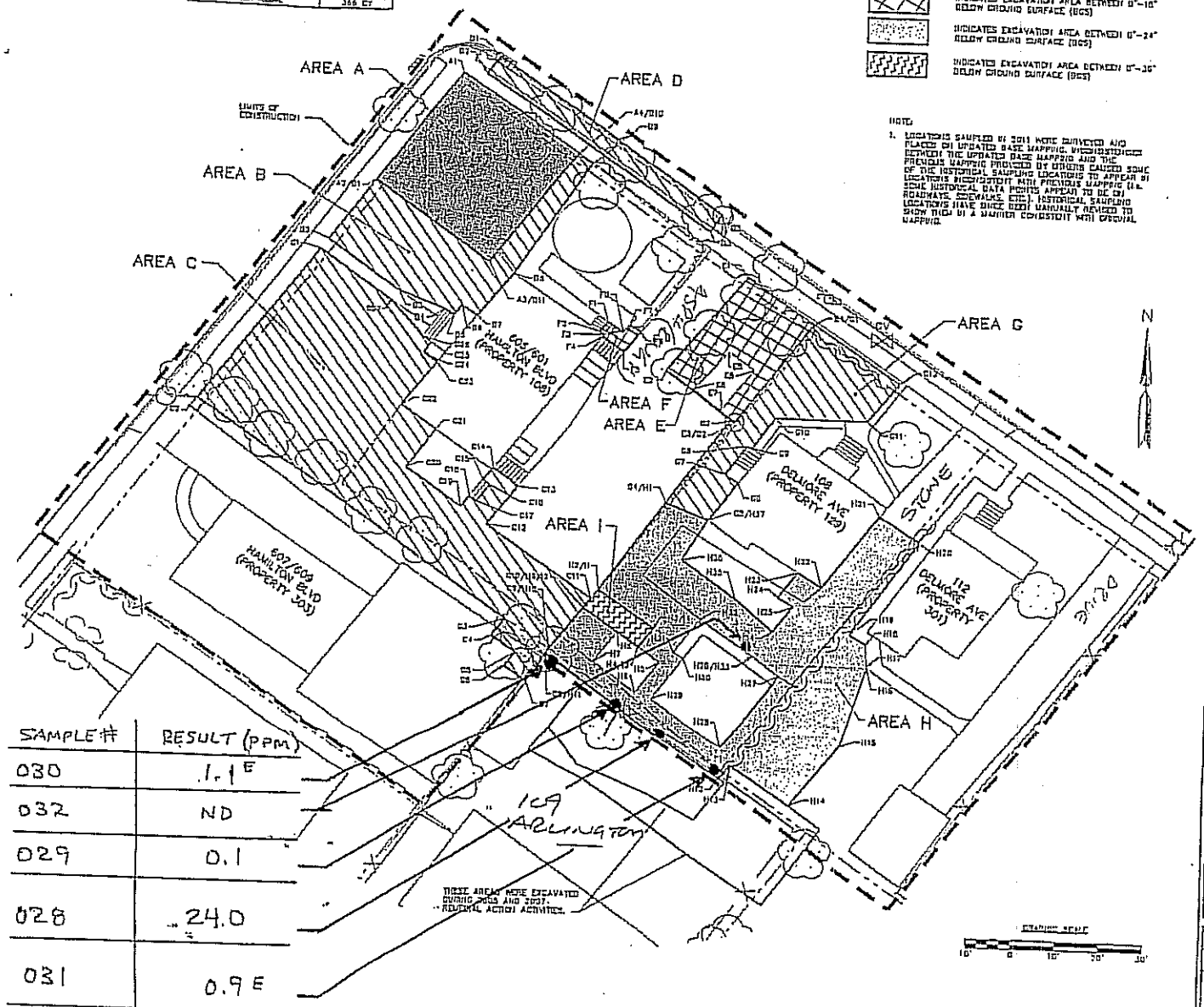
1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

LEGEND

- INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–30" BELOW GROUND SURFACE (BGS)

NOTE:

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH OFFICIAL MAPPING.



SAMPLE #	RESULT (PPM)
030	1.1 E
032	ND
029	0.1
028	24.0
031	0.9 E

ARCADIS ARCADIS BESIX

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

OU-1 REMOVAL DESIGN
CARNEGIE-MELLON ELECTRONICS SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

PROPERTY 109, 129, 301 & 303
EXCAVATION PLAN

FIGURE 1A

DRAWN BY: K. MANCEN
DESIGNED BY: A. MASON
CHECKED BY: D. DEFARO
DATE: MAY 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 12/06/2012	TRANSMITTAL NO. 01450A-146

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO:	FROM:	CONTRACT NO.	CHECK ONE:
Environmental Residency US Army Corps of Engineers 214 State Highway 18 East Brunswick, NJ 08816	Sevenson Environmental Services 2749 Lockport Road Niagara Falls, NY 14305	W912DQ-10-D-3006 0002	[X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION	CHECK ONE: THIS TRANSMITTAL IS
01450A	01-Main Register Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080	FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
17	Final Sample #031 - 112 Delmore Ave	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample passed criteria for PCB's at 0.92 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

[signature] I WZAMBRANA
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Patrick Nejaad, ACOR [signature]	10 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-146

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
17	Final Sample #031 - 112 Delmore Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample passed criteria for PCB's at 0.92 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

12/6/2012

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
14-Nov-12 11:18

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2241
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2241-01	CDE-OU1-112DEL-H3-031	Soil	17-Oct-12 15:20	19-Oct-12 09:15
~~L2241-02~~	~~CDE-OU1-108-DEL-H2-032~~	~~Soil~~	~~17-Oct-12 [illegible]~~	~~19-Oct-12 09:15~~
~~L2241-03~~	~~CDE-OU1-[illegible]~~	~~Soil~~	~~17-Oct-12 17:00~~	~~19-Oct-12 09:15~~
~~L2241-04~~	~~CDE-OU1-[illegible]~~	~~Soil~~	~~17-Oct-12 17:15~~	~~19-Oct-12 09:15~~
~~L2241-05~~	~~CDE-OU1-[illegible]~~	~~Soil~~	~~17-Oct-12 17:30~~	~~19-Oct-12 09:15~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

TABLE 1b – VOLUME OF EXCAVATION		
AREA	CU. FT.	VOLUME
A	1119	41 CY
B	838	31 CY
C	1024	38 CY
D	330	12 CY
E	540	20 CY
F	28	1 CY
G	748	28 CY
H	2316	86 CY
I	94	3 CY
TOTAL EXCAVATION VOLUME		266 CY

NOTES:

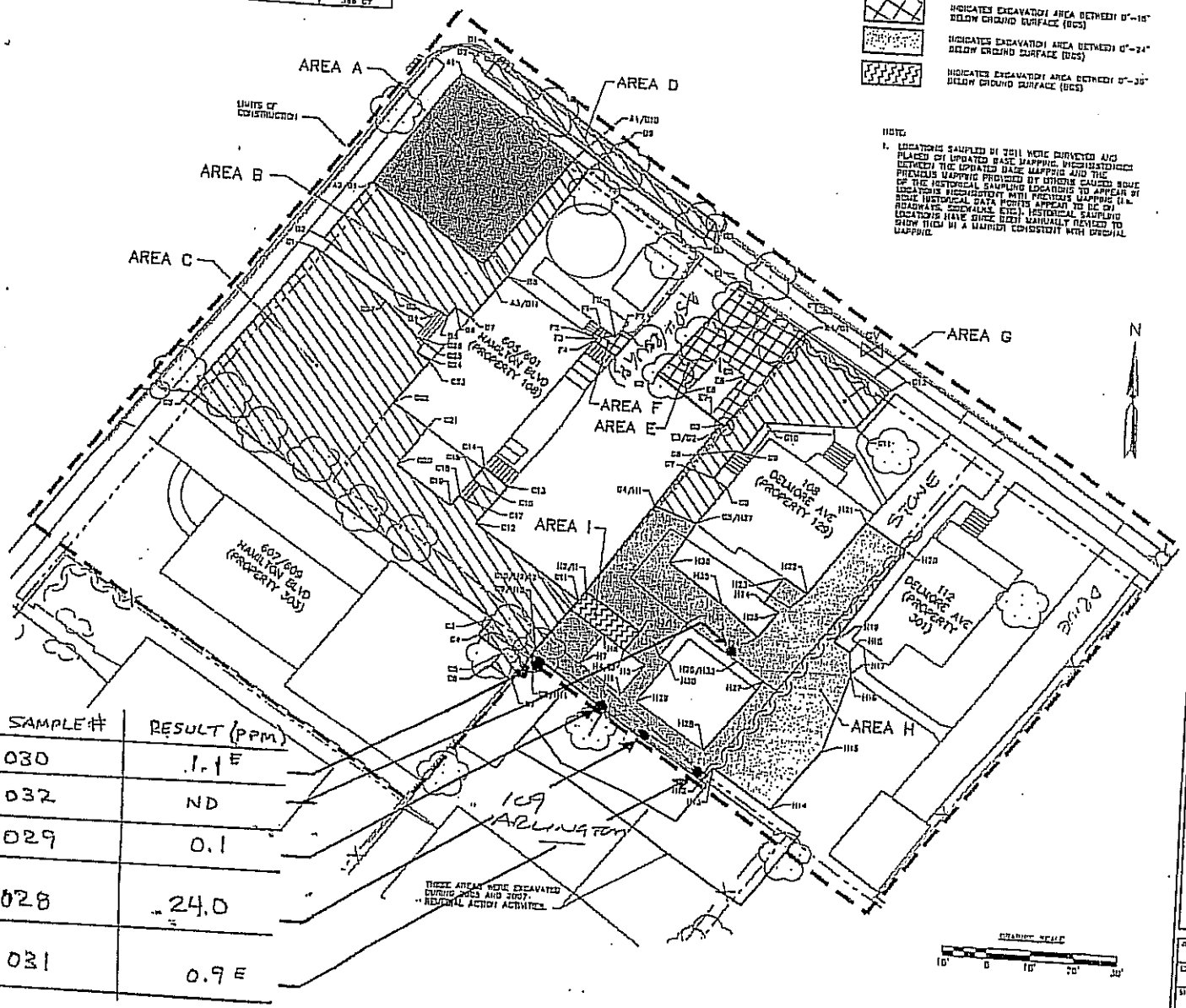
1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

LEGEND

- INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–30" BELOW GROUND SURFACE (BGS)

NOTE:

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR AT LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (I.E. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.



SAMPLE #	RESULT (PPM)
030	1.1 E
032	ND
029	0.1
028	24.0
031	0.9 E

ARCADIS

REVISIONS

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMOVAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

PROJECT TITLE
PROPERTY 109, 129, 301 & 303
EXCAVATION PLAN

CONTRACT TITLE

SHEET NAME
FIGURE 1A

DRAWN BY K. WINDELL
DESIGNED BY A. MASON
CHECKED BY D. COUARD
DATE

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-112DEL-H 3-031

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2241-01A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E3J6486F.D/E3J6486R.D

% Moisture: 8.5 Decanted: (Y/N) N Date Received: 10/19/2012

Extraction: (Type) SONC Date Extracted: 10/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	350	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	350	U
53469-21-9	Aroclor-1242	350	U
12672-29-6	Aroclor-1248	350	U
11097-69-1	Aroclor-1254	350	U
11096-82-5	Aroclor-1260	920	P
37324-23-5	Aroclor-1262	350	U
11100-14-4	Aroclor-1268	350	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68873	88	96	89	96			0
02	LCS-68873	91	100	92	97			0
03	CDE-OU1-140H VD-01-WW-035	80	90	78	83			0
04	CDE-OU1-112D EL-H3-031	78	77	100	94			0
05	CDE-OU1-108-DEL-H2-032	115	136	107	119			0
06	CDE-OU1-140H VD-01-NW-033	81	78	103	92			0
07	CDE-OU1-140H VD-01-SW-034	0 D	0 D	0 D	0 D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: ~~10/18/12~~ 10/17/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/17/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY - MOSTLY SUNNY. 62°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS IN PLACE, PROPER PPE USED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL, LOAD OUT OF EXCAVATION MATERIAL.

Description of Chemical Data Acquisition Work Performed: COLLECTED ONE (1) PCB SOIL SAMPLE FROM HZ PROP. ID# 301, ONE (1) PCB SOIL SAMPLE FROM PROP. ID# 129, THREE (3) PCB SOIL SAMPLES FROM PROP. ID # 128. ALL SHIPPED TO MITKEM LABS FOR 24 HOUR TAT.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: ~~NONE~~ SAMPLES SHIPPED TO MITKEM LABS.

Chemical Parameter Measurement Problems: NONE.

Contingency Sampling: NONE.

Non-conformance Problems: NONE.

Corrective Actions (including approvals): NONE.

Initials of Personnel Performing Corrective Actions: NONE.

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE.

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP. BLANK – NO TRIP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	10/17/12
CQC Systems Manager			

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/18/12

Subject: CHAIN FOR 5 PCB SOILS - 24 HOUR TAT.

Pages: 3

Comments:

1. COC
2. COPY OF FEDEX AIRBILL
3. FEDEX RECEIPT

PLEASE CALL WITH QUESTIONS.

THANKS, ERIC

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HR.
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: 8878-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	CDE-001- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS PLUS 1262/1268
	112DEL-H3-031	10/17/12	1520	G	SO			1		X
	108DEL-H2-032	10/17/12	1530	G	SO			1		X
	140HVD-01-NW-033	10/17/12	1700	G	SO			1		X
	140HVD-01-SW-034	10/17/12	1715	G	SO			1		X
	140HVD-01-WW-035	10/17/12	1730	G	SO			1		X

Below Blank Below Blank

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
KLICKFIELD@SEVENSON.COM
EDD Format ANOVAK@SEVENSON.COM

Relinquished By:	Received By:	Date	Time
[signature]	FEDEX	10/18/12	1200

Condition on receipt: ☐ Good ☐ Problem

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1220120718O325

Ship Date: 18OCT12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Comell
Dept #

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

FRI - 19 OCT A1
PRIORITY OVERNIGHT

TRK# 0201 7992 2190 6516

ZA NCOA

02886
RI-US
PVD

515G1/3CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799221906516
Ship date: 10/18/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(32) 1112 DELMORE AVE
108 DELMORE AVE PCB Samples. 10/17/12

1500 PARTLY CLOUDY - MOSTLY SUNNY, 62°F.
ARRIVE TO 112 DELMORE AVE TO Collect 2 Samples from the property.
P. NOVAK and D. Garcia direct me to collect sample at back prop. line with 109 Arlington Ave along fenceline. Sample location is 12" bls under fence near the corner of ~~112~~ (A) 108 Delmore Ave garage. It looks to be right at the perpendicular property line dividing 108 and 112 Delmore Ave. (The N/S property line) The sample area is approximately 4' NW of the visibly clean fill material along the back prop line with 109 Arlington. See map on p. 19 of this logbook to reference location

1520 collect soil sample CDE-OU1-112DEL-H3-031. Sample will be analyzed for Total PCBs, including Aroclors 1262 and 1268. 1-8oz clear soil jar.
The next sample location is at 108 Delmore Ave property. Location is in front of the garage, directly under the concrete apron at 12" bls.

[signature]. 10/17/12

10/17/12 108 Delmore Ave PCB SAMPLE
140 HAVARD AVE (33)

1530 Collect CDE-OU1-108DEL-H2-032.
1-8oz clear soil jar. PCBs plus 1262 and 1268.

1630 - Move to 140 Havard Ave
D. Garcia directs me to collect 3 PCB samples from side walls within the extended Area 1 excavation. See dotted line around Area 1 on sample map on page 7 of this log book. I will collect samples 033, 034 and 035 from this area. 033 will be from North wall, 034 will be from South wall, 035 will be from West wall. There will be no sample from the East wall under sidewalk. Will bias the individual samples to visibly discolored soil areas in each wall. Material is very rocky - mostly shale. Need to scrape soil from shale pieces in order to obtain sample volume. All samples at 4' bls.

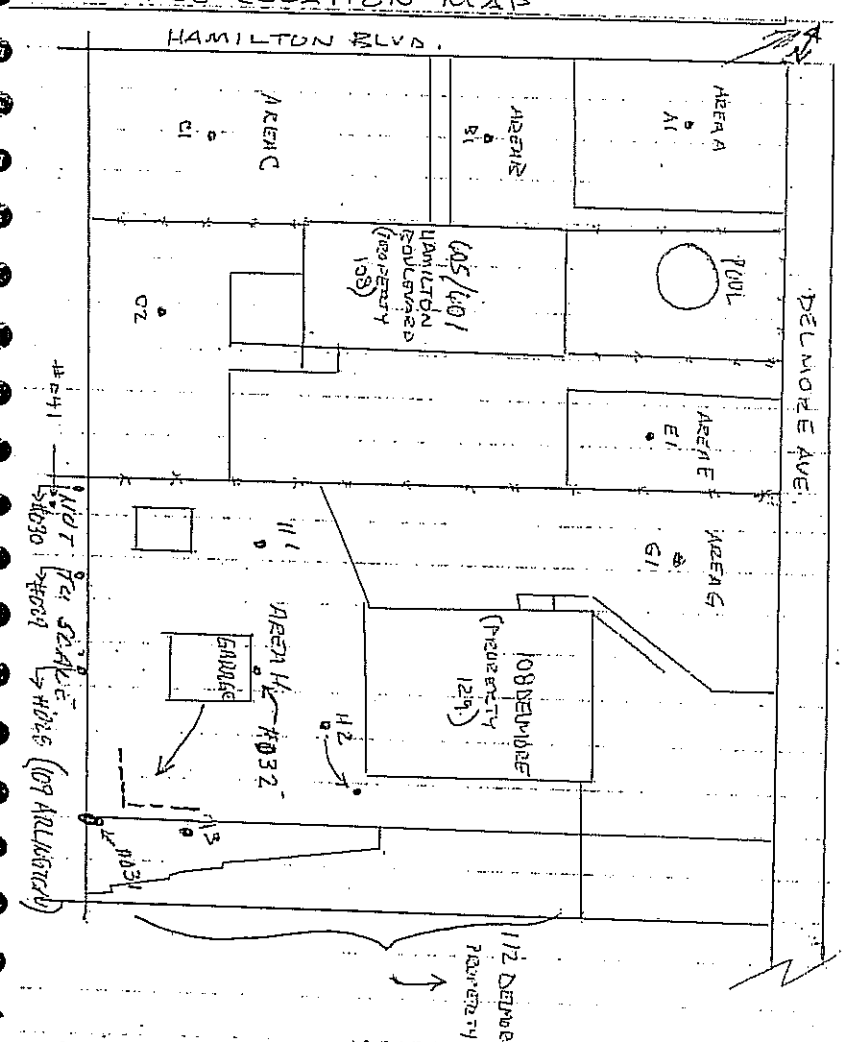
1700 Collect CDE-OU1-140HVD-01-NW-033
1715 Collect CDE-OU1-140HVD-01-SW-034
1730 Collect CDE-OU1-140HVD-01-WW-035
All for PCBs + 1262/1268. 8oz jars.
SEE p. 31. FOR LAB INFO. WILL SHIP ON 10/18/12 SAMPLES ON ICE.

[signature]. 10/17/12 [signature]

8/01/12 WC SAMPLING
605/601 HAMILTON BLVD.
108/112 DELMORE AVE.

(19)

SAMPLE LOCATION MAP



8/01/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-147

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
18	Final Sample #032 - 108 Delmore Ave	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

[signature]
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY
Patrick Nejand, A COR
[signature]

DATE: 12 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-147

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 01450A

PROJECT TITLE AND LOCATION 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
18	Final Sample #032 - 108 Delmore Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
14-Nov-12 11:18

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2241
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2241-01~~	~~CDE-OU1-108-DEL-H2-031~~	~~Soil~~	~~17-Oct-12 15:20~~	~~19-Oct-12 09:15~~
L2241-02	CDE-OU1-108-DEL-H2-032	Soil	17-Oct-12 15:30	19-Oct-12 09:15
~~L2241-03~~	~~CDE-OU1-108-DEL-H2-033~~	~~Soil~~	~~17-Oct-12 17:00~~	~~19-Oct-12 09:15~~
~~L2241-04~~	~~CDE-OU1-108-DEL-H2-034~~	~~Soil~~	~~17-Oct-12 17:15~~	~~19-Oct-12 09:15~~
~~L2241-05~~	~~CDE-OU1-108-DEL-H2-035~~	~~Soil~~	~~17-Oct-12 17:30~~	~~19-Oct-12 09:15~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

TABLE 1b – VOLUME OF EXCAVATION		
AREA	CU. FT.	CU. YD.
A	1318	49 CY
B	815	30 CY
C	1006	37 CY
D	330	12 CY
E	505	19 CY
F	56	2 CY
G	746	28 CY
H	2376	88 CY
I	94	3 CY
TOTAL EXCAVATION VOLUME		268 CY

NOTES:

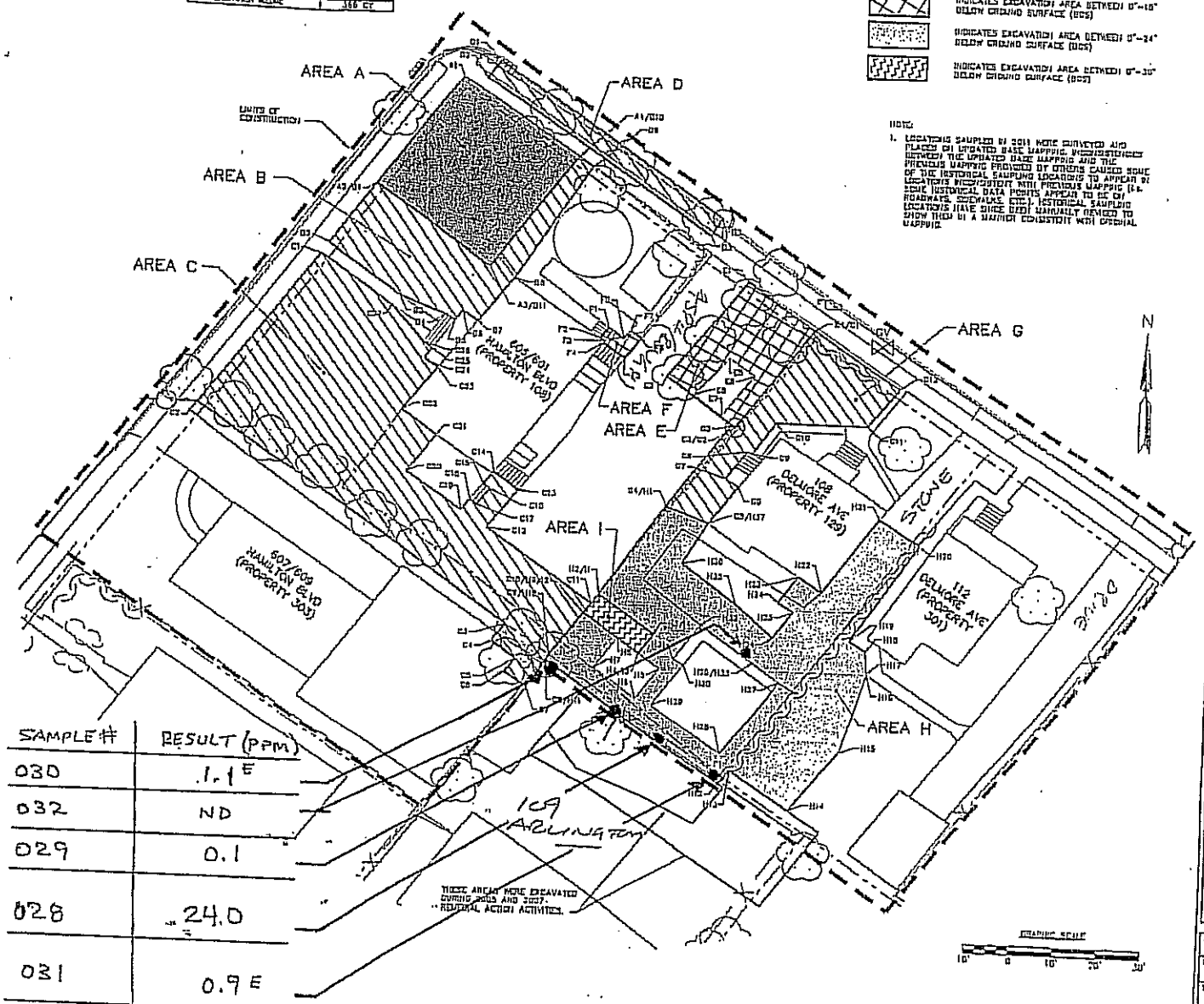
1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 1b.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.

LEGEND

- INDICATES EXCAVATION AREA FROM 0"–8" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA BETWEEN 0"–30" BELOW GROUND SURFACE (BGS)

NOTE:

1. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR AT LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (I.E. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.



SAMPLE #	RESULT (PPM)
030	1.1 E
032	ND
029	0.1
028	24.0
031	0.9 E

ARCADIS BANGLA PUNE

REVISIONS

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 100, 125, 301 & 303
EXCAVATION PLAN

JOB NO.

CONTRACT NO.

SHEET NAME
FIGURE 1A

SHEET 7 OF 15

FILE NAME

DRAWN BY
K. SANCHEZ

DESIGNED BY
A. WASON

CHECKED BY
R. DRUMB

DATE
MAY 2012

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-108-DEL-H2-032

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2241-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E3J6487F.D/E3J6487R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 10/19/2012

Extraction: (Type) SONC Date Extracted: 10/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68873	88		96		89		96				0
02	LCS-68873	91		100		92		97				0
03	CDE-OU1-140H VD-01-WW-035	80		90		78		83				0
04	CDE-OU1-112D EL-H3-031	78		77		100		94				0
05	CDE-OU1-108-DEL-H2-032	115		136		107		119				0
06	CDE-OU1-140H VD-01-NW-033	81		78		103		92				0
07	CDE-OU1-140H VD-01-SW-034	0	D	0	D	0	D	0	D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: ~~10/18/12~~ 10/17/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms	X		
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		X
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/17/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY - MOSTLY SUNNY. 62°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS IN PLACE, PROPER PPE USED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL, LOAD OUT OF EXCAVATION MATERIAL.

Description of Chemical Data Acquisition Work Performed: COLLECTED ONE (1) PCB SOIL SAMPLE FROM HZ PROP. ID# 301, ONE (1) PCB SOIL SAMPLE FROM PROP. ID# 129, THREE (3) PCB SOIL SAMPLES FROM PROP. ID# 128. ALL SHIPPED TO MITKEM LABS FOR 24 HOUR TAT.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: ~~NONE~~ 4 SAMPLES SHIPPED TO MITKEM LABS.

Chemical Parameter Measurement Problems: NONE.

Contingency Sampling: NONE.

Non-conformance Problems: NONE.

Corrective Actions (including approvals): NONE.

Initials of Personnel Performing Corrective Actions: NONE.

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE.

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP. BLANK – NO TRIP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

Name	Signature	Date

QC Reviewer

Name	Signature	Date
ERIC TSCHUDI		10/17/12

CQC Systems Manager

Name	Signature	Date

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES

Fax Number: 4017323499

Phone Number: 4017323400

From: ERIC TSCHUDI

Date: 10/18/12

Subject: CHAIN FOR 5 PCB SOILS - 24 HOUR TAT.

Pages: 3

Comments:

1. COC
2. COPY OF FEDEX AIRBILL
3. FEDEX RECEIPT

PLEASE CALL WITH QUESTIONS.

THANKS, ERIC

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 Hr.
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Containers | Analyses | Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	CDE-DU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS PLUS 1262/1268								
	112DEL-H3-031	10/17/12	1520	G	SO			1		X								
	108DEL-H2-032	10/17/12	1530	G	SO			1		X								
	140HVD-01-NW-033	10/17/12	1700	G	SO			1		X								
	140HVD-01-SW-034	10/17/12	1715	G	SO			1		X								
	140HVD-01-WW-035	10/17/12	1730	G	SO			1		X								

☒ E-mail to ETSCHUDI@SEVENSON.COM
KLICKFIELD@SEVENSON.COM
~~EDD Format~~ ANOVAK@SEVENSON.COM

Relinquished	Received by	Date	Time
[signature]	FED EX	10/18/12	1200

Condition upon receipt: ☐ Used ☐ Ambient ☐ Cold

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J122012071B0325

Ship Date: 18OCT12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 19 OCT A1
PRIORITY OVERNIGHT

TRK# 7992 2190 6516
0201

02886
RI-US
PVD

ZA NCOA

515G1/SCCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide . apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799221906516
Ship date: 10/18/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(32) 1112 DELMORE AVE
108 DELMORE AVE PCB Samples. 10/17/12

1500 PARTLY CLOUDY - MOSTLY SUNNY, 62°F.
ARRIVE TO 112 DELMORE AVE TO Collect 2 Samples from the property.
P. NOVAK and D. Garcia direct me to collect sample at back prop. line with 109 Arlington Ave along fenceline. Sample location is 12" bls under fence near the corner of ~~112~~ (2) 108 Delmore Ave garage. It looks to be right at the perpendicular property line dividing 108 and 112 Delmore Ave. (The N/S property line) The sample area is approximately 4' NW of the visibly clean fill material along the back prop line with 109 Arlington. See map on p. 19 of this logbook to reference location.

1520 collect soil sample CDE-OVI-112DEL-H3-031.
Sample will be analyzed for Total PCBs, including Aroclors 1262 and 1268. 1-8oz clear soil jar.
The next sample location is at 108 Delmore Ave property. Location is in front of the garage, directly under the concrete apron at 12" bls.

[signature]. 10/17/12

10/17/12 108 Delmore Ave PCB SAMPLE
140 HAVARD AVE (33)

1530 Collect CDE-OVI-108DEL-H2-032.
1-8oz clear soil jar. PCBs N/S 1262 and 1260.

1630 - Move to 140 Havard Ave
D. Garcia directs me to collect 3 PCB samples from side walls within the extended Area 1 excavation. See dotted line around Area 1 on sample map on Page 7 of this log book. I will collect samples 033, 034 and 035 from this area. 033 will be from North wall, 034 will be from South wall, 035 will be from West wall. There will be no sample from the East wall under sidewalk. Will bias the individual samples to visibly discolored soil areas in each wall. Material is very rocky - mostly shale. Need to scrape soil from shale pieces in order to obtain sample volume. All samples at 4' bls.

1700 Collect CDE-OVI-140HVD-01-NW-033
1715 Collect CDE-OVI-140HVD-01-SW-034
1730 Collect CDE-OVI-140HVD-01-WW-035
All for PCBs + 1262/1268. 8oz jars.

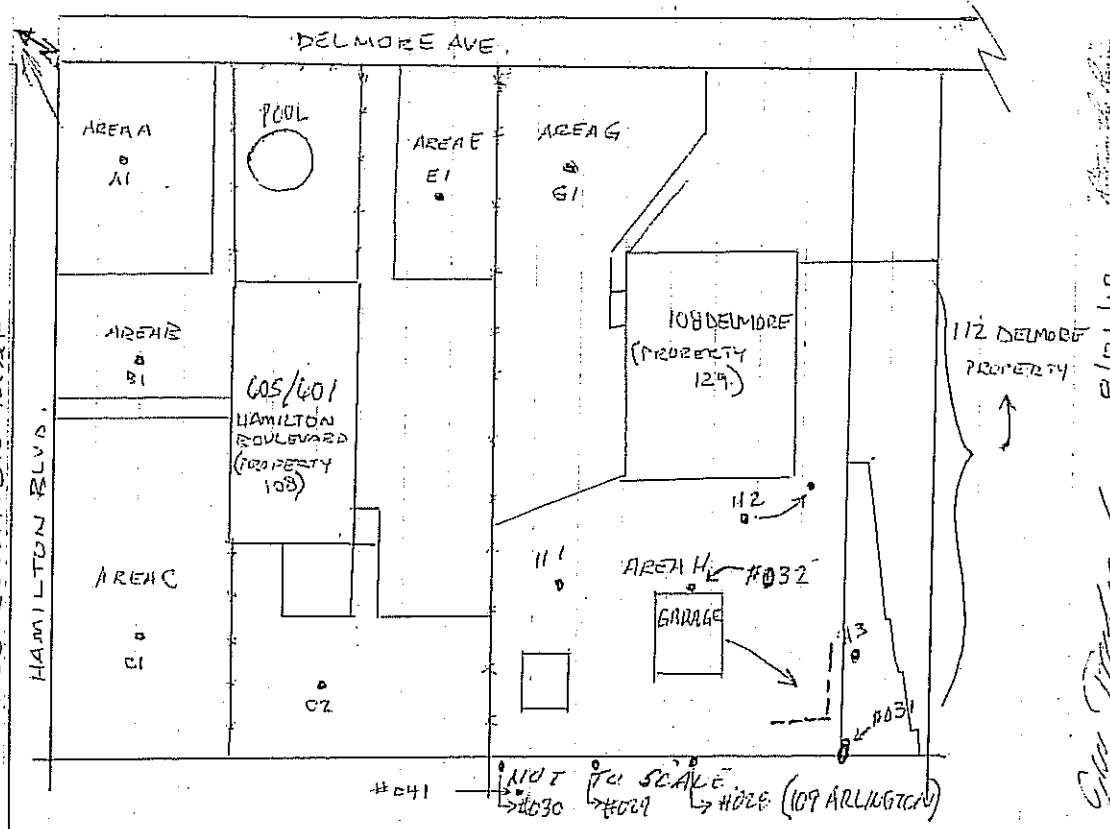
SEE P. 31. FOR LAB INFO. WILL SHIP ON 10/18/12 SAMPLES ON ICE.

[signature]. 10/17/12 [signature]

19

8/01/12 WC SAMPLING
605/601 HAMILTON BLVD.
108/112 DELMORE AVE.

SAMPLE LOCATION MAP



8/01/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-148

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 6) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
19	Final Sample #033 & #035 - 140 Harvard	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample #033 passed criteria for PCB's at 0.90 ppm
Sample #035 passed criteria for PCB's at 0.16 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand A COR

DATE: 11 Dec 2012

ENG FORM 4025, MAR 95 (ER 415-1-10) EDITION OF SEP 93 IS OBSOLETE. SHEET 1 OF 1 (Proponent: CEMP-CE)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-148

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
19	Final Sample #033 & #035 - 140 Harvard	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #033 passed criteria for PCB's at 0.90 ppm
Sample #035 passed criteria for PCB's at 0.16 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
14-Nov-12 11:18

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2241
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2241-01~~	~~CDE-OU1-112DEL-113-031~~	~~Soil~~	~~17-Oct-12 15:30~~	~~19-Oct-12 09:15~~
~~L2241-02~~	~~CDE-OU1-108DEL-112-032~~	~~Soil~~	~~17-Oct-12 15:30~~	~~19-Oct-12 09:15~~
L2241-03	CDE-OU1-140HVD-01-NW-033	Soil	17-Oct-12 17:00	19-Oct-12 09:15
~~L2241-04~~	~~CDE-OU1-140HVD-01-SW-034~~	~~Soil~~	~~17-Oct-12 17:15~~	~~19-Oct-12 09:15~~
L2241-05	CDE-OU1-140HVD-01-WW-035	Soil	17-Oct-12 17:30	19-Oct-12 09:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

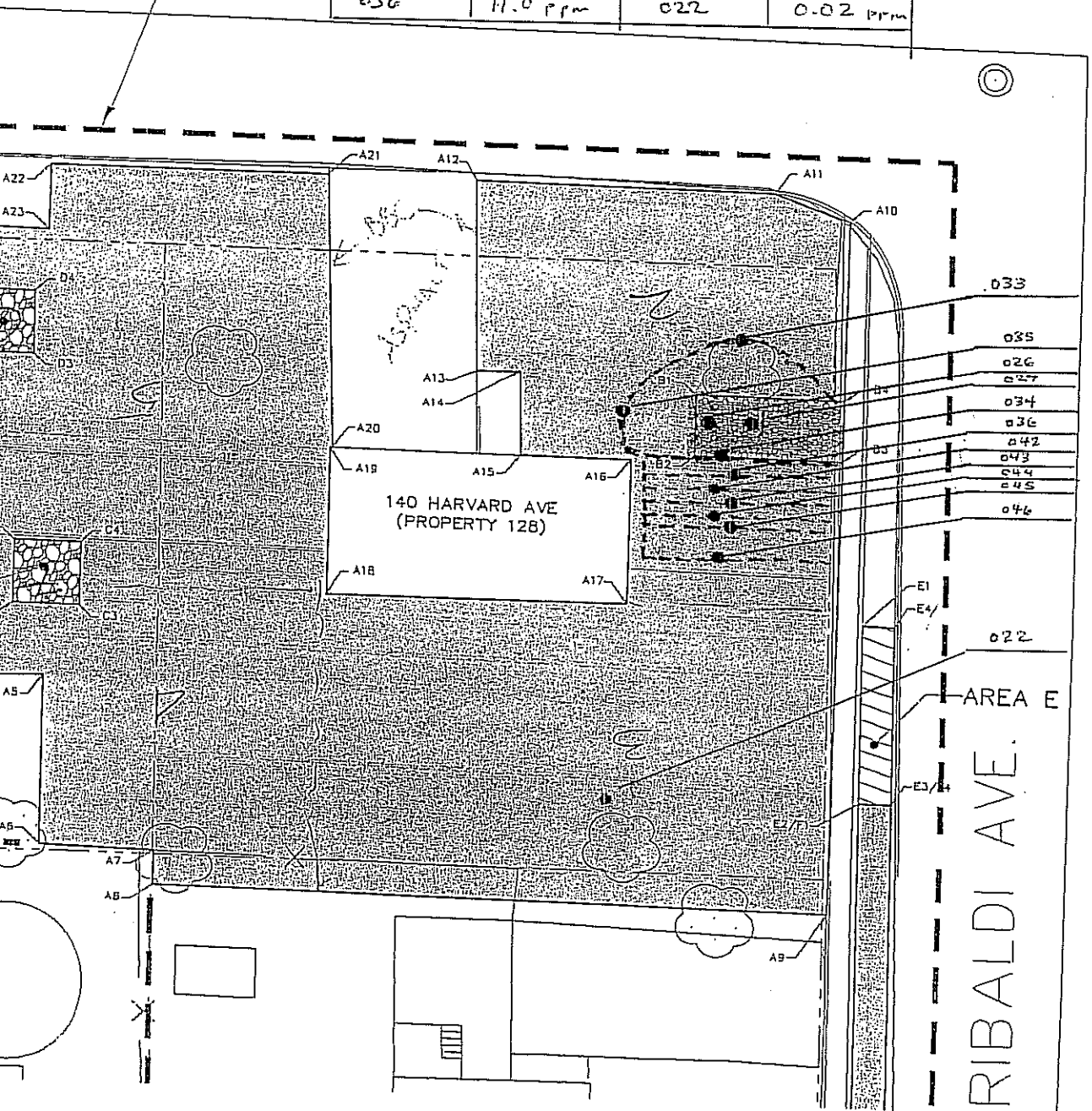
LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633378.0715	515352.4338
A2	633330.5101	515323.0369
A3	633315.7367	515343.3714
A4	633298.5400	515330.1000
A5	633306.4800	515345.1100
A6	633283.2055	515328.4225
A7	633257.6232	515342.2716
A8	633248.1220	515338.8560
A9	633188.0270	515420.1990
A10	633280.3050	515407.2504
A11	633290.2011	515400.3843
A12	633318.3941	515444.8152
A13	633291.5100	515427.4000
A14	633287.0660	515432.7710
A15	633270.5095	515425.0675
A16	633266.9622	515430.3056
A17	633247.0415	515424.2431
A18	633273.3806	515387.9880
A19	633293.1574	515402.2706
A20	633292.0485	515402.5594
A21	633329.1900	515426.0000
A22	633353.4858	515392.9268
A23	633345.2200	515386.8100
B1	633270.3723	515452.4759
B2	633282.2822	515440.5981
B3	633249.2510	515461.4403
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	[illegible]	[illegible]

REV
No

PROJECT NAME

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-01-NW-033

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2241-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6488F.D/E3J6488R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 10/19/2012

Extraction: (Type) SONC Date Extracted: 10/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	380	U
11104-28-2	Aroclor-1221	380	U
11141-16-5	Aroclor-1232	380	U
53469-21-9	Aroclor-1242	380	U
12672-29-6	Aroclor-1248	380	U
11097-69-1	Aroclor-1254	900	
11096-82-5	Aroclor-1260	380	U
37324-23-5	Aroclor-1262	380	U
11100-14-4	Aroclor-1268	380	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-01-WW-035

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2241-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3J6408F.D/E3J6408R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 10/19/2012

Extraction: (Type) SONC Date Extracted: 10/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	160	
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68873	88		96		89		96				0
02	LCS-68873	91		100		92		97				0
03	CDE-OU1-140H VD-01-WW-035	80		90		78		83				0
04	CDE-OU1-112D EL-H3-031	78		77		100		94				0
05	CDE-OU1-108-DEL-H2-032	115		136		107		119				0
06	CDE-OU1-140H VD-01-NW-033	81		78		103		92				0
07	CDE-OU1-140H VD-01-SW-034	0	D	0	D	0	D	0	D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: ~~10/18/12~~ 10/17/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms	X		
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		X
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/17/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY - MOSTLY SUNNY. 62°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS IN PLACE, PROPER PPE USED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL, LOAD OUT OF EXCAVATION MATERIAL.

Description of Chemical Data Acquisition Work Performed: COLLECTED ONE (1) PCB SOIL SAMPLE FROM HE PROP. ID# 301, ONE (1) PCB SOIL SAMPLE FROM PROP. ID# 129, THREE (3) PCB SOIL SAMPLES FROM PROP. ID# 128. ALL SHIPPED TO MITKEM LABS FOR 24 HOUR TAT.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: ~~NONE~~ SAMPLES SHIPPED TO MITKEM LABS.

Chemical Parameter Measurement Problems: NONE.

Contingency Sampling: NONE.

Non-conformance Problems: NONE.

Corrective Actions (including approvals): NONE.

Initials of Personnel Performing Corrective Actions: NONE.

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE.

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP. BLANK – NO TRIP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI _____ 10/17/12
Name Signature Date

CQC Systems Manager _____
Name Signature Date

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES

Fax Number: 4017323499

Phone Number: 4017323400

From: ERIC TSCHUDI

Date: 10/18/12

Subject: CHAIN FOR 5 PCB SOILS - 24 HOUR TAT.

Pages: 3

Comments:

1. COC
2. COPY OF FEDEX AIRBILL
3. FEDEX RECEIPT

PLEASE CALL WITH QUESTIONS.

THANKS, ERIC

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HR.
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: CDE-DU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS PLUS 1262 / 1268
	112DEL-H3-031	10/17/12	1520	G	SO			1		X
	108DEL-H2-032	10/17/12	1530	G	SO			1		X
	140HVD-01-NW-033	10/17/12	1700	G	SO			1		X
	140HVD-01-SW-034	10/17/12	1715	G	SO			1		X
	140HVD-01-WW-035	10/17/12	1730	G	SO			1		X

☒ E-mail to ETSCHUDI@SEVENSON.COM
KLICKFIELD@SEVENSON.COM
EDD Format ANOVAK@SEVENSON.COM

Relinquished by: [signature] Date: 10/18/12 Time: 1200

Received by: FED EX

Condition on Receipt: ☐ Good ☐ Bad ☐ Cooler ☐ Preserved

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1220120718O325

Ship Date: 18OCT12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 19 OCT A1
PRIORITY OVERNIGHT

TRK# 7992 2190 6516
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799221906516
Ship date: 10/18/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(32) 1112 DELMORE AVE
108 DELMORE AVE PCB Samples. 10/17/12

1500 PARTLY CLOUDY - MOSTLY SUNNY, 62°F.
ARRIVE TO 112 DELMORE AVE TO Collect 2 Samples from the property.
P. NOVAK and D. Garcia direct me to collect sample at back prop. line with 109 Arlington Ave along fenceline. Sample location is 12" bls under fence near the corner of ~~112~~ (2) 108 Delmore Ave garage. It looks to be right at the perpendicular property line dividing 108 and 112 Delmore Ave. (The N/S property line) The sample area is approximately 4' NW of the visibly clean fill material along the back prop line with 109 Arlington. See map on p. 19 of this logbook to reference location.
1520 collect soil sample CDE-OVI-112DEL-H3-031. Sample will be analyzed for Total PCBs, including Aroclors 1262 and 1268. 1-8oz clear soil jar.
The next sample location is at 108 Delmore Ave property. Location is in front of the garage, directly under the concrete apron at 12" bls.

[signature]. 10/17/12

10/17/12 108 Delmore Ave PCB SAMPLE
140 HAVARD AVE (33)

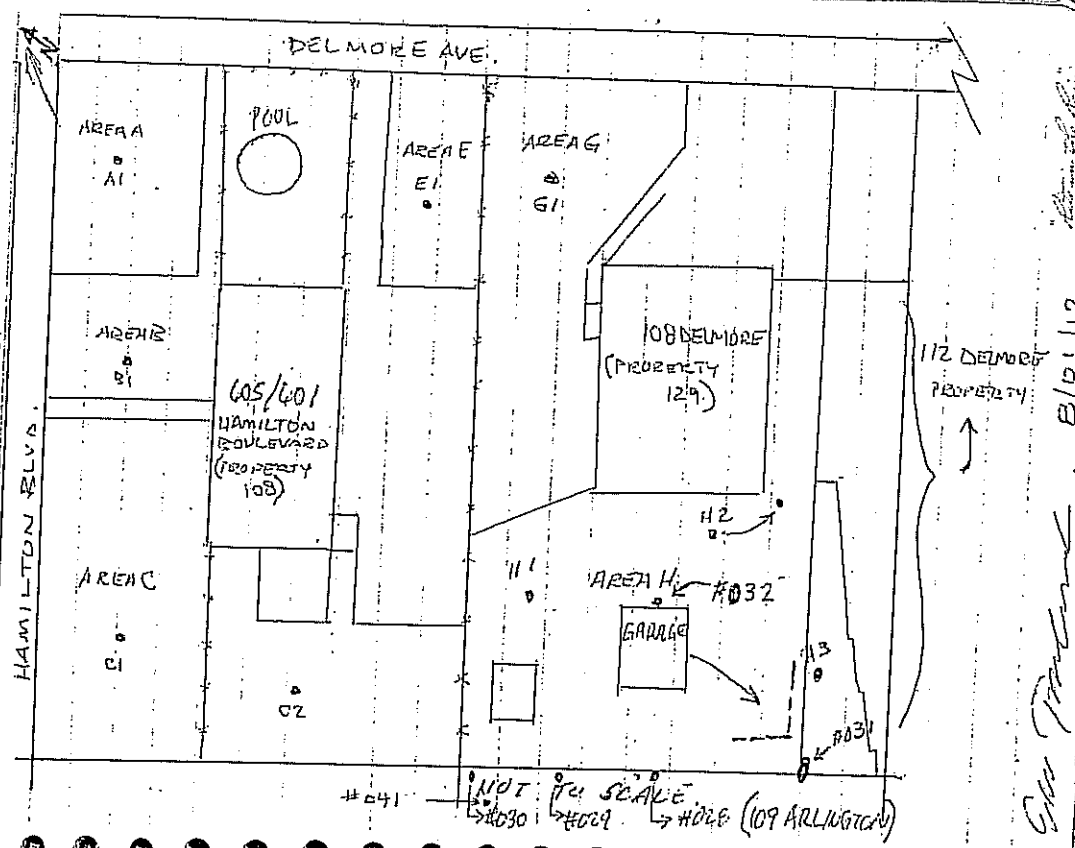
1530 Collect CDE-OVI-108DEL-H2-032.
1-8oz clear soil jar. PCBs plus 1262 and 1268.
1630 - Move to 140 Havard Ave.
D. Garcia directs me to collect 3 PCB samples from side walls within the extended Area 1 excavation. See dotted line around Area 1 on sample map on Page 7 of this log book. I will collect samples 033, 034 and 035 from this area. 033 will be from North wall, 034 will be from South wall, 035 will be from West wall. There will be no sample from the East wall under sidewalk. Will bias the individual samples to visibly discolored soil areas in each wall. Material is very rocky - mostly shale. Need to scrape soil from shale pieces in order to obtain sample volume. All samples at 4' bls.
1700 Collect CDE-OVI-140HVD-01-NW-033
1715 Collect CDE-OVI-140HVD-01-SW-034
1730 Collect CDE-OVI-140HVD-01-WW-035
All for PCBs + 1262/1268. 8oz jars.
SEE p. 31. FOR LAB INFO. WILLSHIP ON 10/18/12 SAMPLES ON ICE.

[signature]. 10/17/12 [signature]

(19)

8/01/12 WC SAMPLING
605/601 HAMILTON BLVD.
108/112 DELMORE AVE.

SAMPLE LOCATION MAP



8/01/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-149

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
20	Info Sample #034 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample failed criteria for PCB's at 6.90 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, ACOR

DATE: 13 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 12/06/2012	TRANSMITTAL NO. 01450A-149

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO:	FROM:	CONTRACT NO.	CHECK ONE:
Environmental Residency US Army Corps of Engineers 214 State Highway 18 East Brunswick, NJ 08816	Sevenson Environmental Services 2749 Lockport Road Niagara Falls, NY 14305	W912DQ-10-D-3006 0002	[X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION	CHECK ONE: THIS TRANSMITTAL IS
01450A	01-Main Register Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080	FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
20	Info Sample #034 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 6.90 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

[signature]

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
14-Nov-12 11:18

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: L2241
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2241-01~~	~~CDE-OU1-W2DEL-H3-031~~	~~Soil~~	~~17-Oct-12 15:20~~	~~19-Oct-12 09:15~~
~~L2241-02~~	~~CDE-OU1-108-DEL-H2-032~~	~~Soil~~	~~17-Oct-12 15:30~~	~~19-Oct-12 09:15~~
~~L2241-03~~	~~CDE-OU1-140HVD-01-NW-033~~	~~Soil~~	~~17-Oct-12 17:00~~	~~19-Oct-12 09:15~~
L2241-04	CDE-OU1-140HVD-01-SW-034	Soil	17-Oct-12 17:15	19-Oct-12 09:15
~~L2241-05~~	~~CDE-OU1-140HVD-01-WW-035~~	~~Soil~~	~~17-Oct-12 17:30~~	~~19-Oct-12 09:15~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

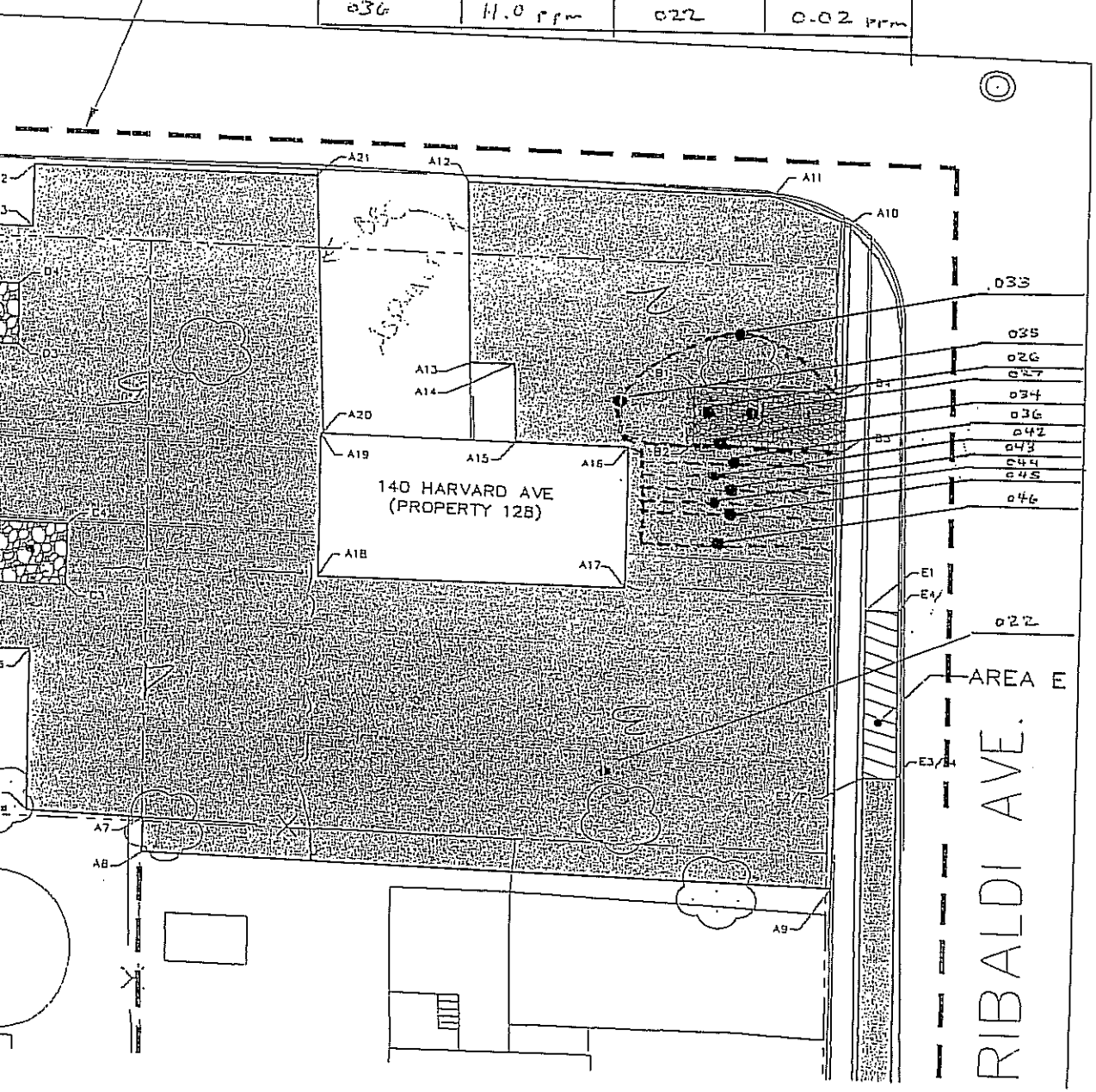
LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

ID#	RESULT	ID#:	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.4 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA G AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.9715	515352.4330
A2	633320.5181	515323.0369
A3	633313.7367	515343.3714
A4	633298.5400	515330.1000
A5	633288.4800	515345.1100
A6	633303.2055	515328.4725
A7	633252.8737	515342.2716
A8	633240.1230	515330.0560
A9	633180.0220	515420.1000
A10	633280.3050	515487.2504
A11	633290.2811	515480.3043
A12	633310.3541	515444.0152
A13	633281.5100	515427.4000
A14	633287.0660	515432.7710
A15	633278.5095	515425.0075
A16	633266.9622	515430.3336
A17	633247.0415	515424.2431
A18	633273.3806	515387.9800
A19	633293.1524	515402.2786
A20	633292.0485	515402.5504
A21	633329.1900	515426.8000
A22	633353.4850	515392.0260
A23	633345.2200	515386.0100
B1	633270.3723	515452.4759
B2	633262.2022	515440.5981
B3	633249.2510	515461.4403
B4	633287.3112	515470.3602
C1	633306.5666	515353.6795
C2	633290.4764	515347.0016

REV

PROJECT NAME

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-01-SW-034

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2241-04A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E3J6489F.D/E3J6489R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/19/2012

Extraction: (Type) SONC Date Extracted: 10/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 40.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1500	U
11104-28-2	Aroclor-1221	1500	U
11141-16-5	Aroclor-1232	1500	U
53469-21-9	Aroclor-1242	1500	U
12672-29-6	Aroclor-1248	1500	U
11097-69-1	Aroclor-1254	6900	P
11096-82-5	Aroclor-1260	1500	U
37324-23-5	Aroclor-1262	1500	U
11100-14-4	Aroclor-1268	1500	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2241 Mod. Ref No.: SDG No.: SL2241

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68873	88	96	89	96			0
02	LCS-68873	91	100	92	97			0
03	CDE-OU1-140H VD-01-WW-035	80	90	78	83			0
04	CDE-OU1-112D EL-H3-031	78	77	100	94			0
05	CDE-OU1-108-DEL-H2-032	115	136	107	119			0
06	CDE-OU1-140H VD-01-NW-033	81	78	103	92			0
07	CDE-OU1-140H VD-01-SW-034	0 D	0 D	0 D	0 D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: ~~10/18/12~~ 10/17/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?			
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms	X		
• Additional Forms (list below)			X
			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/17/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY – MOSTLY SUNNY. 62°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS IN PLACE, PROPER PPE USED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL, LOAD OUT OF EXCAVATION MATERIAL.

Description of Chemical Data Acquisition Work Performed: COLLECTED ONE (1) PCB SOIL SAMPLE FROM HZ PROP. ID# 301, ONE (1) PCB SOIL SAMPLE FROM PROP. ID# 129, THREE (3) PCB SOIL SAMPLES FROM PROP. ID # 128. ALL SHIPPED TO MITKEM LABS FOR 24 HOUR TAT.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: ~~NONE~~ SAMPLES SHIPPED TO MITKEM LABS.

Chemical Parameter Measurement Problems: NONE.

Contingency Sampling: NONE.

Non-conformance Problems: NONE.

Corrective Actions (including approvals): NONE.

Initials of Personnel Performing Corrective Actions: NONE.

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE.

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMP. BLANK – NO TRIP BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/17/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/17/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI [signature] 10/17/12
Name Signature Date

CQC Systems Manager _____
Name Signature Date

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/18/12

Subject: CHAIN FOR 5 PCB SOILS - 24 HOUR TAT.

Pages: 3

Comments:

1. COC
2. COPY OF FEDEX AIRBILL
3. FEDEX RECEIPT

PLEASE CALL WITH QUESTIONS.

THANKS, ERIC

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 Hr.
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: CDE-DU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS PLUS 1262, 1268								
	112DEL-H3-031	10/17/12	1520	G	SO			1		X								
	108DEL-H2-032	10/17/12	1530	G	SO			1		X								
	140HVD-01-NW-033	10/17/12	1700	G	SO			1		X								
	140HVD-01-SW-034	10/17/12	1715	G	SO			1		X								
	140HVD-01-WW-035	10/17/12	1730	G	SO			1		X								

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
KLICKFIELD@SEVENSON.COM
EDD Format ANOVAK@SEVENSON.COM

Relinquished	Received	Date	Time
[signature]	FED EX	10/18/12	1200

Condition upon receipt: ☐ Cool ☐ Ambient ☐ Cold

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201207180325

Ship Date: 18OCT12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Comell
Dept #

FRI - 19 OCT A1
PRIORITY OVERNIGHT

TRK# 7992 2190 6516
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:
Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI
028861784
US
4017323400

Ship from:
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ
07080
US
9087695301

Shipment Information:
Tracking no.: 799221906516
Ship date: 10/18/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(32) 1112 DELMORE AVE 10/17/12
108 DELMORE AVE PCB Samples.

1500 PARTLY CLOUDY - MOSTLY SUNNY, 62°F.
ARRIVE TO 112 DELMORE AVE TO Collect 2 Samples from the property.
P. NOVAK and D. Garcia direct me to collect sample at back prop. line with 109 Arlington Ave along Fenceline. Sample location is 12" bls under fence near the corner of ~~112~~ (2) 108 Delmore Ave garage. It looks to be right at the perpendicular property line dividing 108 and 112 Delmore Ave. (The N/S property line) The sample area is approximately 4' NW of the visibly clean fill material along the back prop line with 109 Arlington. See map on p. 19 of this logbook to reference location.

1520 collect soil sample CDE-OVI-112DEL-H3-031. Sample will be analyzed for Total PCBs, including Aroclors 1262 and 1268. 1-8oz clear soil jar.
The next sample location is at 108 Delmore Ave property. Location is in front of the garage, directly under the concrete apron at 12" bls.

[signature]. 10/17/12

10/17/12 108 Delmore Ave PCB SAMPLE (33)
140 HAVARD AVE

1530 Collect CDE-OVI-108DEL-H2-032.
1-8oz clear soil jar. PCBs plus 1262 and 1268.

1630 - Move to 140 Havard Ave.
D. Garcia directs me to collect 3 PCB samples from side walls within the extended Area 1 excavation. See dotted line around Area 1 on sample map on Page 7 of this log book. I will collect samples 033, 034 and 035 from this area. 033 will be from North wall, 034 will be from South wall, 035 will be from West wall. There will be no sample from the East wall under sidewalk. Will bias the individual samples to visibly discolored soil areas in each wall. Material is very rocky - mostly shale. Need to scrape soil from shale pieces in order to obtain sample volume. All samples at 4' bls.

1700 Collect CDE-OVI-140HVD-01-NW-033
1715 Collect CDE-OVI-140HVD-01-SW-034
1730 Collect CDE-OVI-140HVD-01-WW-035
All for PCBs + 1262/1268. 8oz jars.
SEE p. 31. FOR LAB INFO. WILL SHIP ON 10/18/12 SAMPLES ON ICE.

[signature]. 10/17/12 [signature]

(19)

8/01/12 WC SAMPLING
605/601 HAMILTON BLVD.
108/112 DELMORE AVE.

SAMPLE LOCATION MAP

8/01/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-150

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
21	Info Sample #036 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample failed criteria for PCB's at 11.00 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, A COR

DATE: 12 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-150

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
21	Info Sample #036 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 11.00 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
16-Nov-12 12:19

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2274
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2274-01	CDE-OU1-140HVD-SW2-036	Soil	23-Oct-12 08:20	24-Oct-12 09:17
~~L2274-02~~	~~CDE-OU1-1000GAR-FYL-037~~	~~Soil~~	~~23-Oct-12 14:00~~	~~24-Oct-12 09:17~~
~~L2274-03~~	~~CDE-OU1-1000GAR-FYL-038~~	~~Soil~~	~~23-Oct-12 14:10~~	~~24-Oct-12 09:17~~
~~L2274-04~~	~~CDE-OU1-1000GAR-FYL-039~~	~~Soil~~	~~23-Oct-12 14:20~~	~~24-Oct-12 09:17~~
~~L2274-05~~	~~CDE-OU1-1000GAR-FYL-040~~	~~Soil~~	~~23-Oct-12 14:30~~	~~24-Oct-12 09:17~~
~~L2274-06~~	~~CDE-OU1-109ARL-041~~	~~Soil~~	~~23-Oct-12 15:00~~	~~24-Oct-12 09:17~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

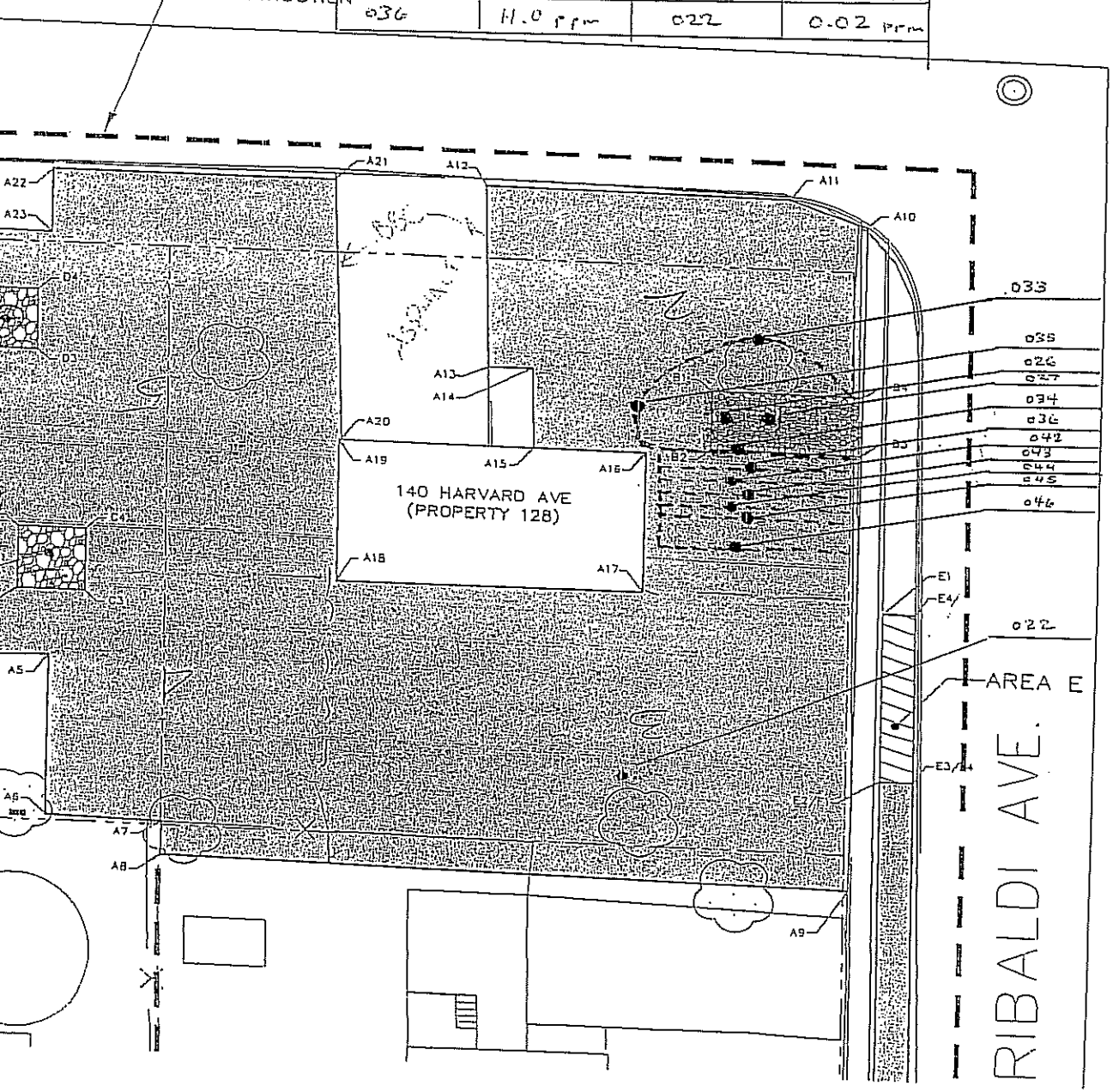
LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION, COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.0715	615352.4339
A2	633330.5101	615323.0360
A3	633315.7362	515343.3714
A4	633298.5400	515330.1000
A5	633285.4800	515345.1100
A6	633283.2055	515328.4225
A7	633252.8232	515342.2716
A8	633240.1220	515338.0560
A9	633180.0220	515420.1990
A10	633280.3050	515407.2504
A11	633290.2811	515400.3843
A12	633310.3941	515444.0152
A13	633291.5100	515427.4800
A14	633287.8660	515432.7710
A15	633278.5995	515425.0675
A16	633266.9622	515430.3356
A17	633247.6415	516424.2431
A18	633273.3806	515387.9880
A19	633293.1524	515402.2786
A20	633292.9485	515402.6504
A21	633329.1900	515426.8800
A22	633353.4058	515392.9260
A23	633345.2200	515386.0100
B1	633270.3723	515452.4759
B2	633287.2822	515446.5981
B3	633249.2519	515464.4403
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	633290.4764	515347.0016

PROJECT NAME

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-S
W2-036

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2274-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6559F.D/E3J6559R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/24/2012

Extraction: (Type) SONC Date Extracted: 10/24/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/24/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 50.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1900	U
11104-28-2	Aroclor-1221	1900	U
11141-16-5	Aroclor-1232	1900	U
53469-21-9	Aroclor-1242	1900	U
12672-29-6	Aroclor-1248	1900	U
11097-69-1	Aroclor-1254	11000	
11096-82-5	Aroclor-1260	1900	U
37324-23-5	Aroclor-1262	1900	U
11100-14-4	Aroclor-1268	1900	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68994	87		96		89		99				0
02	LCS-68994	91		100		91		99				0
03	CDE-OU1-1000 GAR-FYL-037	87		98		87		95				0
04	CDE-OU1-1000 GAR-FYL-038	72		82		74		81				0
05	CDE-OU1-1000 GAR-FYL-039	80		91		78		86				0
06	CDE-OU1-1000 GAR-FYL-040	72		82		79		81				0
07	CDE-OU1-140H VD-SW2-036	0	D	0	D	0	D	0	D			4
08	CDE-OU1-109A RL-041	74		71		90		115				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/23/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY SUNNY. 42°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE.

Planned Daily Activities: EXCAVATION OF POTENTIALLY CONTAMINATED SOIL MATERIAL FROM RESIDENTIAL PROPERTIES. BACKFILL OF COMPLETED EXCAVATIONS.

Description of Chemical Data Acquisition Work Performed: PCB SAMPLING OF 140 HARVARD AVE, AREA 1, SIDEWALL-SOUTH #2, SECOND SAMPLE FOR THIS WALL LOCATION. SAMPLED ~~109 ARLINGTON~~ 1000 GARIBALDI PROPERTY FRONT YARD-LEFT, 3 SAMPLES. 109 ARLINGTON - 1 SAMPLE - BACKYARD. ALL PCB SAMPLE

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Jim Pollard 10/23/12

Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	10/23/12
CQC Systems Manager	[illegible]	[illegible]	10-23-12

Seveson Environmental Services Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/23/12

Subject: # COC FOR 6 PCB SOILS - 24 HOUR TAT.

Pages: 4

Comments:

COC, FEDEX AIRBILL, FEDEX RECEIPT.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 TAT
All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Containers / Analyses

Lab Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262 AND 1268	TEMP.
	140HVD-SW2-036	10/23/12	0820	G	SO			1		X	
	1000GAR-FYL-037	10/23/12	1400	G	SO			1		X	
	1000GAR-FYL-038	10/23/12	1410	G	SO			1		X	
	1000GAR-FYL-039	10/23/12	1420	G	SO			1		X	
	1000GAR-FYL-040	10/23/12	1430	G	SO			1		X	
	109ARL-041	10/23/12	1500	G	SO			1		X	
	TEMP BLANK					1					X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
~~EDD Format~~ KLICKFIELD@SEVENSON.COM
ANOVAK@SEVENSON.COM

Condition upon receipt: ☐ Ice ☐ Ambient ☐ G

Relinquished by	Received by	Date	Time
[signature]	FED EX	10/23/12	1800

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1220121015032 5

Ship Date: 23OCT12
ActWgt: 20.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 24 OCT A1
PRIORITY OVERNIGHT

TRK# 7939 1325 6525
0201

ZA NCOA

02886
RI-US
PVD

515G1/BCCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 793913256525
Ship date: 10/23/2012
Estimated shipping charges: 34.16

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(34) 140 HARVARD AVE
AREA - 1 WALL SAMPLING

10/23/12 WEATHER: MOSTLY SUNNY - 42°F.

0800 E. TSCHUDI ARRIVES TO 140 HARVARD TO COLLECT PCB ONLY SAMPLE FROM AREA 1 EXCAVATION AT THE SOUTH WALL. THIS IS A RESAMPLE OF THE SOUTH WALL SAMPLE THAT HAD A PCB CONCENTRATION OF 24 PPM. (034) THE "SW2" PART OF THE SAMPLE ID WILL INDICATE THE SECOND SAMPLE OF THE SOUTH WALL. THE OPERATOR IS IN THE PROCESS OF EXCAVATING AN ADDITIONAL 2 FEET OF MATERIAL FROM THE SOUTH WALL, AT WHICH POINT I WILL COLLECT A SAMPLE FROM AREAS WITHIN THE WALL THAT APPEAR TO BE DISCOLORED, OR SUSPECTED TO BE MATERIAL WHICH MAY CONTAIN CONTAMINATED MATERIAL.

0820 COLLECT CDE-001-140HVD-SW2-036 USING CLEAN SOIL TROWEL. COLLECT MATERIAL FROM MULTIPLE LOCATIONS ALONG SOUTH WALL WITHIN AREA 1 EXCAVATION. SAMPLE DEPTH IS AT 4' BLS, ALTHOUGH AT MID WAY OF EXISTING WALL.

10/23/12

1000 GARIBALDI AVE
FRONT YARD - LEFT

WEATHER: OVERCAST, 63°F. 10/25/12 (35)

1330 SET UP TO COLLECT ADDITIONAL SAMPLES IN THE FRONT YARD OF 1000 GARIBALDI AVE. THE AREA OF SAMPLING IS IN THE FRONT YARD, TO THE LEFT OF THE WALKWAY TO THE FRONT DOOR - AS YOU FACE THE HOUSE FROM THE STREET.

SAMPLE #025, AT THE LEFT FRONT YARD NEAR THE SIDEWALK HAD A RESULT OF 1.6 ppm CONCENTRATION PCBs. THEREFORE, ADDITIONAL SAMPLING IS REQUIRED IN ORDER TO IDENTIFY THE EXTENT OF ELEVATED PCB LEVELS IN THE SOIL. ADDITIONAL SAMPLES IN 5 DIRECTIONS WILL BE COLLECTED. SEE SAMPLE LOCATION MAP ON P. 27 FOR REFERENCE. SAMPLE LOCATION AROUND THE FAILED #025 SAMPLE LOCATION WILL BE WITHIN THE LEFT SIDE FRONT YARD. #037 WILL BE COLLECTED 2' IN FROM SIDEWALK - AT A DEPTH OF 12" BLS, 9' FROM #025 LOCATION TO THE SOUTH. #038 AND #039 WILL BE COLLECTED AT 12" AND 24" BLS, 4' FROM #025 to the West. #040 will be collected at 12" bls, 2' from the sidewalk and 9' from #025 location to the North.

10/23/12

1000 GARIBALDI PCB SAMPLING
109 ARLINGTON SAMPLE

(36) 10/23/12

1400 COLLECT CDE-OU1-1000GAR-FYL-037 AT 12" BLS. SAMPLE LOCATION IS 2' INTO THE YARD FROM THE SIDEWALK, AND 9' ~~FROM~~ SOUTH OF THE #025 LOCATION. 1-8oz CLEAR GLASS JAR FILLED FOR TOTAL PCB + 1262/1268 ANALYSIS.

1410 COLLECT CDE-OU1-1000GAR-FYL-038 AT 12" BLS - FILL 1-8oz JAR FOR PCB + ANALYSIS. CONTINUE AUGERING TO COLLECT:

1420 CDE-OU1-1000GAR-FYL-039 AT 24" BLS. SAMPLE LOCATION IS 4' INTO THE YARD, 4' FROM #025 SAMPLE.

1430 COLLECT CDE-OU1-1000GAR-FYL-040 AT 12" BLS. SAMPLE LOCATION IS 2' INTO THE YARD FROM SIDEWALK, AND 9' TO NORTH OF #025 LOCATION 4" FROM STONE SCALLOPING ALONG DRIVEWAY. ALL SAMPLES TO BE SHIPPED TO MITKEM LABS.

1445 MOVE TO 109 ARLINGTON EXCAVATION. ADDITIONAL 2' EXCAVATION INTO 109 ARLINGTON PROPERTY. MACHINE IS DIGGING FROM 108 DELMORE PROPERTY.

1500 COLLECT CDE-OU1-109ARL-041 SAMPLE AT 12" BLS IN SIDEWALL HEADING INTO 109 ARLINGTON PROP. SAMPLE IS 2' SOUTH OF #030 LOCATION WHICH FAILED AND HAS BEEN EXCAVATED. SEE MAP ON P. 19.

[signature] 10/23/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-151

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
22	Final Sample #037 - #040 1000 Garibaldi	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample #037 passed criteria for PCB's at 0.32 ppm
Sample #038 passed criteria for PCB's at 0.21 ppm
Sample #039 passed criteria for PCB's at 0.05 ppm
Sample #040 passed criteria for PCB's at 0.36 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

for [illegible]

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY
Patrick Nejand, A COR

DATE: 11 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-151

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
22	Final Sample #037 - #040 1000 Garibaldi	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #037 passed criteria for PCB's at 0.32 ppm
Sample #038 passed criteria for PCB's at 0.21 ppm
Sample #039 passed criteria for PCB's at 0.05 ppm
Sample #040 passed criteria for PCB's at 0.36 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
16-Nov-12 12:19

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2274
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2274-01~~	~~CDE-OU1-140UVD-SW2-036~~	~~Soil~~	~~23-Oct-12 08:20~~	~~24-Oct-12 09:17~~
L2274-02	CDE-OU1-1000GAR-FYL-037	Soil	23-Oct-12 14:00	24-Oct-12 09:17
L2274-03	CDE-OU1-1000GAR-FYL-038	Soil	23-Oct-12 14:10	24-Oct-12 09:17
L2274-04	CDE-OU1-1000GAR-FYL-039	Soil	23-Oct-12 14:20	24-Oct-12 09:17
L2274-05	CDE-OU1-1000GAR-FYL-040	Soil	23-Oct-12 14:30	24-Oct-12 09:17
~~L2274-06~~	~~CDE-OU1-109ARL-041~~	~~Soil~~	~~23-Oct-12 15:00~~	~~24-Oct-12 09:17~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

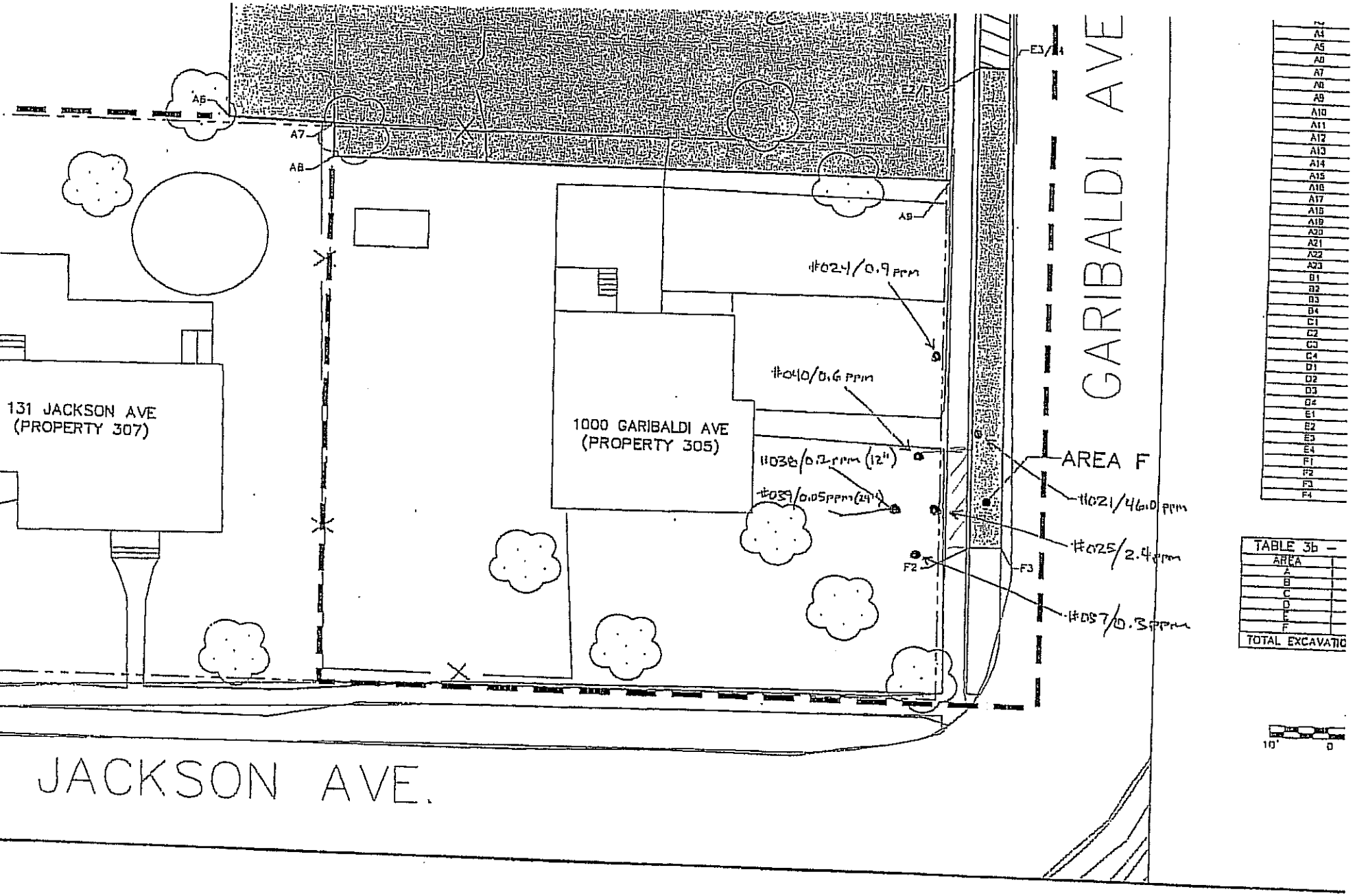
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director



GARIBALDI AVE
JACKSON AVE.
131 JACKSON AVE
(PROPERTY 307)
1000 GARIBALDI AVE
(PROPERTY 305)
AREA F
#024/0.9 ppm
#040/0.6 ppm
#038/0.2 ppm (12")
#039/0.05 ppm (24")
#021/46.0 ppm
#025/2.4 ppm
#037/0.3 ppm
A6
A7
A8
A9
E2/F1
E3/F4
F2
F3
TABLE 3b –
AREA
A
B
C
D
E
F
TOTAL EXCAVATIO
10'
0

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-1000GAR-FYL-037

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2274-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3J6554F.D/E3J6554R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 10/24/2012

Extraction: (Type) SONC Date Extracted: 10/24/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/24/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	320	
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-1000GAR-FYL-038

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2274-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E3J6555F.D/E3J6555R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 10/24/2012

Extraction: (Type) SONC Date Extracted: 10/24/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/24/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	210	
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-1000GAR-FYL-039

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2274-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3J6556F.D/E3J6556R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 10/24/2012

Extraction: (Type) SONC Date Extracted: 10/24/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/24/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	51	
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-1000GAR-FYL-040

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2274-05A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E3J6557F.D/E3J6557R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 10/24/2012

Extraction: (Type) SONC Date Extracted: 10/24/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/24/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	250	P
11096-82-5	Aroclor-1260	360	
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68994	87	96	89	99			0
02	LCS-68994	91	100	91	99			0
03	CDE-OU1-1000 GAR-FYL-037	87	98	87	95			0
04	CDE-OU1-1000 GAR-FYL-038	72	82	74	81			0
05	CDE-OU1-1000 GAR-FYL-039	80	91	78	86			0
06	CDE-OU1-1000 GAR-FYL-040	72	82	79	81			0
07	CDE-OU1-140H VD-SW2-036	0 D	0 D	0 D	0 D			4
08	CDE-OU1-109A RL-041	74	71	90	115			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/25/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY SUNNY. 42°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE.

Planned Daily Activities: EXCAVATION OF POTENTIALLY CONTAMINATED SOIL MATERIAL FROM RESIDENTIAL PROPERTIES. BACKFILL OF COMPLETED EXCAVATIONS.

Description of Chemical Data Acquisition Work Performed: SAMPLING OF PCB 140 HARVARD AVE, AREA 1, SIDEWALL-SOUTH #2, SECOND SAMPLE FOR THIS WALL LOCATION. SAMPLED ~~109 ARLINGTON~~ 1000 GARIBALDI PROPERTY FRONT YARD-LEFT; 3 SAMPLES. 109 ARLINGTON - 1 SAMPLE - BACKYARD. ALL PCB SAMPLES

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/23/12

Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

Sevenson Project Manager_____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		10/23/12
CQC Systems Manager			10-23-12

Stevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHODI

Date: 10/23/12

Subject: # COC FOR 6 PCB SOILS - 24 HOUR TAT.

Pages: 4

Comments:

COC, FEDEX AIRBILL, FEDEX RECEIPT.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 TAT
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695501

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id: CDE-001-

Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262 AND 1268	TEMP.							
140HVD-SW2-036	10/23/12	0820	G	SO			1		X								
1000GAR-FYL-037	10/23/12	1400	G	SO			1		X								
1000GAR-FYL-038	10/23/12	1410	G	SO			1		X								
1000GAR-FYL-039	10/23/12	1420	G	SO			1		X								
1000GAR-FYL-040	10/23/12	1430	G	SO			1		X								
109ARL-041	10/23/12	1500	G	SO			1		X								
TEMP BLANK					1					X							

Preservation Code below

Analysis

Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
KLICKFIELD@SEVENSON.COM
ANOVAK@SEVENSON.COM
~~EDD Format~~

Relinquished: Received: FED EX Date: 10/23/12 Time: 1800

Condition Upon Receipt: ☐ Cool ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201210150325

Ship Date: 23OCT12
ActWgt: 20.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 24 OCT A1
PRIORITY OVERNIGHT

TRK# 7939 1325 6525
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 793913256525
Ship date: 10/23/2012
Estimated shipping charges: 34.16

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

140 HARVARD AVE
AREA - 1 WALL SAMPLING

(34) 10/23/12 WEATHER: MOSTLY SUNNY - 42°F.

0800 E. TSCHUDI ARRIVES TO 140 HARVARD TO COLLECT PCB ONLY SAMPLE FROM AREA 1 EXCAVATION AT THE SOUTH WALL. THIS IS A RESAMPLE OF THE SOUTH WALL SAMPLE THAT HAD A PCB CONCENTRATION OF 24 PPM. (034) THE "SW2" PART OF THE SAMPLE ID WILL INDICATE THE SECOND SAMPLE OF THE SOUTH WALL. THE OPERATOR IS IN THE PROCESS OF EXCAVATING AN ADDITIONAL 2 FEET OF MATERIAL FROM THE SOUTH WALL, AT WHICH POINT I WILL COLLECT A SAMPLE FROM AREAS WITHIN THE WALL THAT APPEAR TO BE DISCOLORED, OR SUSPECTED TO BE MATERIAL WHICH MAY CONTAIN CONTAMINATED MATERIAL.

0820 COLLECT CDE-001-140HVD-SW2-036 USING CLEAN SOIL TROWEL. COLLECT MATERIAL FROM MULTIPLE LOCATIONS ALONG SOUTH WALL WITHIN AREA 1 EXCAVATION. SAMPLE DEPTH IS AT 4' BLS, ALTHOUGH AT MID WAY OF EXISTING WALL.

E. Tschudi 10/23/12

1000 GARIBALDI AVE
FRONT YARD - LEFT

WEATHER: OVERCAST, 63°F. 10/23/12 (35)

1330 SET UP TO COLLECT ADDITIONAL SAMPLES IN THE FRONT YARD OF 1000 GARIBALDI AVE. THE AREA OF SAMPLING IS IN THE FRONT YARD, TO THE LEFT OF THE WALKWAY TO THE FRONT DOOR - AS YOU FACE THE HOUSE FROM THE STREET. SAMPLE #025, AT THE LEFT FRONT YARD NEAR THE SIDEWALK HAD A RESULT OF ~~2~~ 1.6 ppm CONCENTRATION PCBs. THEREFORE, ADDITIONAL SAMPLING IS REQUIRED IN ORDER TO IDENTIFY THE EXTENT OF ELEVATED PCB LEVELS IN THE SOIL. ADDITIONAL SAMPLES IN 3 DIRECTIONS WILL BE COLLECTED. SEE SAMPLE LOCATION MAP ON P. 27 FOR REFERENCE. SAMPLE LOCATION AROUND THE FAILED #025 SAMPLE LOCATION WILL BE WITHIN THE LEFT SIDE FRONT YARD. #037 WILL BE COLLECTED 2' IN FROM SIDEWALK - AT A DEPTH OF 12" BLS, 9' FROM #025 LOCATION TO THE SOUTH. #038 AND #039 WILL BE COLLECTED AT 12" AND 24" BLS, ~~2~~ 4' FROM #025 to the West. #040 will be collected at 12" bls, 2' from the sidewalk and 9' from #025 location to the North.

E. Tschudi 10/23/12

1000 GARIBALDI PCB SAMPLING
109 ARLINGTON SAMPLE

(36) 10/23/12

1400 COLLECT CDE-OUI-1000GAR-FYL-037 AT 12" BLS. SAMPLE LOCATION IS 2' INTO THE YARD FROM THE SIDEWALK, AND 9' ~~FROM~~ SOUTH OF THE #025 LOCATION. 1-8oz CLEAR GLASS JAR FILLED FOR TOTAL PCB + 1262/1268 ANAL 4515.

1410 COLLECT CDE-OUI-1000GAR-FYL-038 AT 12" BLS - FILL 1-8oz JAR FOR PCB + ANAL 4515. CONTINUE AUGERING TO COLLECT:

1420 CDE-OUI-1000GAR-FYL-039 AT 24" BLS. SAMPLE LOCATION IS 4' INTO THE YARD, 4' FROM #025 SAMPLE.

1430 COLLECT CDE-OUI-1000GAR-FYL-040 AT 12" BLS. SAMPLE LOCATION IS 2' INTO THE YARD FROM SIDEWALK, AND 9' TO NORTH OF #025 LOCATION 4" FROM STONE SCALLOPING ALONG DRIVEWAY. ALL SAMPLES TO BE SHIPPED TO HITKEM LABS.

1445 MOVE TO 109 ARLINGTON EXCAVATION. ADDITIONAL 2' EXCAVATION INTO 109 ARLINGTON PROPERTY. MACHINE IS DIGGING FROM 108 DELMORE PROPERTY.

1500 COLLECT CDE-OUI-109ARL-041 SAMPLE AT 12" BLS IN SIDEWALL HEADING INTO 109 ARLINGTON PROP. SAMPLE IS 2' SOUTH OF #036 LOCATION WICH FAILED AND HAS BEEN EXCAVATED. SEE MAP ON P.19.

[signature] 10/23/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-152

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
23	Info Sample #041 - 109 Arlington Ave	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample failed criteria for PCB's at 1.60 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, A COR

DATE: 12 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-152

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
23	Info Sample #041 - 109 Arlington Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 1.60 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

12/06/2012

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
16-Nov-12 12:19

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: L2274
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2274-01~~	~~CDE-OU1-140HVD-SW2-036~~	~~Soil~~	~~23-Oct-12 08:20~~	~~24-Oct-12 09:17~~
~~L2274-02~~	~~CDE-OU1-100GARC-FYL-037~~	~~Soil~~	~~23-Oct-12 14:00~~	~~24-Oct-12 09:17~~
~~L2274-03~~	~~CDE-OU1-100GARC-FYL-038~~	~~Soil~~	~~23-Oct-12 14:10~~	~~24-Oct-12 09:17~~
~~L2274-04~~	~~CDE-OU1-100GARC-FYL-039~~	~~Soil~~	~~23-Oct-12 14:20~~	~~24-Oct-12 09:17~~
~~L2274-05~~	~~CDE-OU1-100GARC-FYL-040~~	~~Soil~~	~~23-Oct-12 14:30~~	~~24-Oct-12 09:17~~
L2274-06	CDE-OU1-109ARL-041	Soil	23-Oct-12 15:00	24-Oct-12 09:17

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

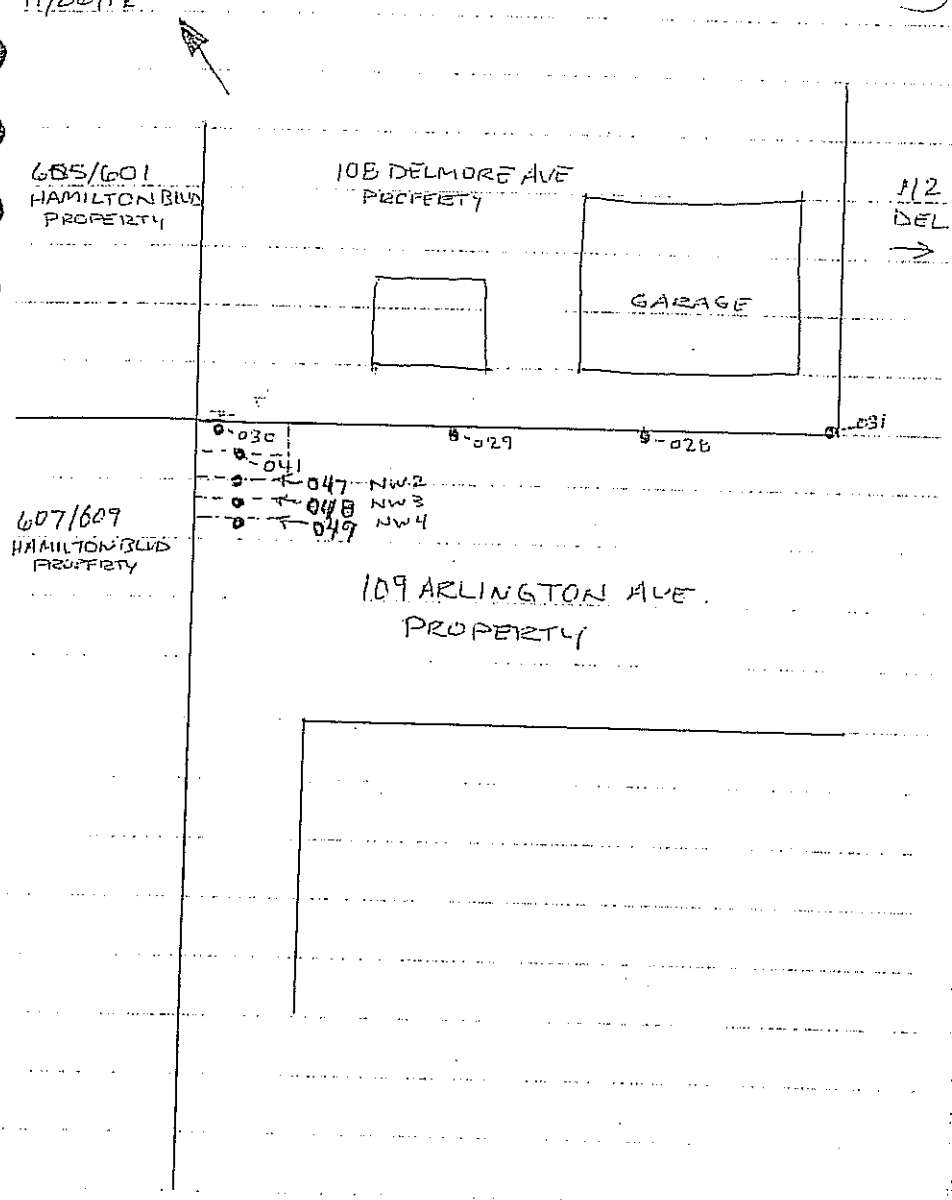
Authorized by:

Yihai Ding
Laboratory Director

109 ARLINGTON AVE.
SOIL SAMPLE LOCATION MAP

(41)

11/06/12



11/06/12

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-109ARL-041

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2274-06A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E3J6560F.D/E3J6560R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/24/2012

Extraction: (Type) SONC Date Extracted: 10/24/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/24/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	390	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	390	U
53469-21-9	Aroclor-1242	390	U
12672-29-6	Aroclor-1248	390	U
11097-69-1	Aroclor-1254	1600	
11096-82-5	Aroclor-1260	1200	
37324-23-5	Aroclor-1262	390	U
11100-14-4	Aroclor-1268	390	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2274 Mod. Ref No.: SDG No.: SL2274

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-68994	87		96		89		99				0
02	LCS-68994	91		100		91		99				0
03	CDE-OU1-1000 GAR-FYL-037	87		98		87		95				0
04	CDE-OU1-1000 GAR-FYL-038	72		82		74		81				0
05	CDE-OU1-1000 GAR-FYL-039	80		91		78		86				0
06	CDE-OU1-1000 GAR-FYL-040	72		82		79		81				0
07	CDE-OU1-140H VD-SW2-036	0	D	0	D	0	D	0	D			4
08	CDE-OU1-109A RL-041	74		71		90		115				0

QC LIMITS

TCX = Tetrachloro-m-xylene (34-147)

DCB = Decachlorobiphenyl (60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/23/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY SUNNY. 42°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE.

Planned Daily Activities: EXCAVATION OF POTENTIALLY CONTAMINATED SOIL MATERIAL FROM RESIDENTIAL PROPERTIES. BACKFILL OF COMPLETED EXCAVATIONS.

Description of Chemical Data Acquisition Work Performed: PCB SAMPLING OF 140 HARVARD AVE, AREA 1, SIDEWALL-SOUTH #2, SECOND SAMPLE FOR THIS WALL LOCATION. SAMPLED ~~109 ARLINGTON~~ 1000 GARIBALDI PROPERTY FRONT YARD-LEFT, 3 SAMPLES. 109 ARLINGTON - 1 SAMPLE - BACKYARD. ALL PCB SAMPLES

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/23/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/12

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☒ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		10/23/12
CQC Systems Manager			10-23-12

Severson Environmental Services Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/23/12

Subject: # COC FOR 6 PCB SOILS - 24 HOUR TAT.

Pages: 4

Comments:

COC, FEDEX AIRBILL, FEDEX RECEIPT.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 TAT
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5101

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id: CDE-OU1-

Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS + 1262 AND 12L5	TEMP.								
140HVD-SW2-036	10/23/12	0820	G	SO			1		X									
1000GAR-FYL-037	10/23/12	1400	G	SO			1		X									
1000GAR-FYL-038	10/23/12	1410	G	SO			1		X									
1000GAR-FYL-039	10/23/12	1420	G	SO			1		X									
1000GAR-FYL-040	10/23/12	1430	G	SO			1		X									
109ARL-041	10/23/12	1500	G	SO			1		X									
TEMP BLANK					1					X								

Distribution (Native code below)

Analysis

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
KLICKFIELD@SEVENSON.COM
ANOVAK@SEVENSON.COM
~~EDD Format~~

Relinquished by:	Received by:	Date	Time
[signature]	FED EX	10/23/12	1800

Condition upon receipt: Ice Ambient

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J122012101503 25

Ship Date: 23OCT12
ActWgt: 20.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

WED - 24 OCT A1
PRIORITY OVERNIGHT

TRK# 7939 1325 6525
0201

ZA NCOA

02886
RI-US
PVD

515G1/9CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 793913256525
Ship date: 10/23/2012
Estimated shipping charges: 34.16

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(34) 140 HARVARD AVE
AREA - 1 WALL SAMPLING

10/23/12 WEATHER: MOSTLY SUNNY - 42°F.

0800 E. TSCHUDI ARRIVES TO 140 HARVARD TO COLLECT PCB ONLY SAMPLE FROM AREA 1 EXCAVATION AT THE SOUTH WALL. THIS IS A RESAMPLE OF THE SOUTH WALL SAMPLE THAT HAD A PCB CONCENTRATION OF 24 PPM (034). THE "SW2" PART OF THE SAMPLE ID WILL INDICATE THE SECOND SAMPLE OF THE SOUTH WALL. THE OPERATOR IS IN THE PROCESS OF EXCAVATING AN ADDITIONAL 2 FEET OF MATERIAL FROM THE SOUTH WALL, AT WHICH POINT I WILL COLLECT A SAMPLE FROM AREAS WITHIN THE WALL THAT APPEAR TO BE DISCOLORED, OR SUSPECTED TO BE MATERIAL WHICH MAY CONTAIN CONTAMINATED MATERIAL.

0820 COLLECT CDE-001-140HVD-SW2-036 USING CLEAN SOIL TROWEL. COLLECT MATERIAL FROM MULTIPLE LOCATIONS ALONG SOUTH WALL WITHIN AREA 1 EXCAVATION. SAMPLE DEPTH IS AT 4' BLS, ALTHOUGH AT MID WAY OF EXISTING WALL.

10/23/12

1000 GARIBALDI AVE
FRONT YARD - LEFT

WEATHER: OVERCAST, 63°F. 10/23/12 (35)

1330 SET UP TO COLLECT ADDITIONAL SAMPLES IN THE FRONT YARD OF 1000 GARIBALDI AVE. THE AREA OF SAMPLING IS IN THE FRONT YARD, TO THE LEFT OF THE WALKWAY TO THE FRONT DOOR - AS YOU FACE THE HOUSE FROM THE STREET.

SAMPLE #025, AT THE LEFT FRONT YARD NEAR THE SIDEWALK HAD A RESULT OF ~~2~~ 1.6 ppm CONCENTRATION PCBs. THEREFORE, ADDITIONAL SAMPLING IS REQUIRED IN ORDER TO IDENTIFY THE EXTENT OF ELEVATED PCB LEVELS IN THE SOIL. ADDITIONAL SAMPLES IN 5 DIRECTIONS WILL BE COLLECTED. SEE SAMPLE LOCATION MAP ON P. 27 FOR REFERENCE. SAMPLE LOCATION AROUND THE FAILED #025 SAMPLE LOCATION WILL BE WITHIN THE LEFT SIDE FRONT YARD. #037 WILL BE COLLECTED 2' IN FROM SIDEWALK - AT A DEPTH of 12" BLS, 9' FROM #025 LOCATION TO THE SOUTH. #038 AND #039 WILL BE COLLECTED AT 12" AND 24" BLS, 4' FROM #025 to the West. #040 will be collected at 12" bls, 2' from the sidewalk and 9' from #025 location to the North.

10/23/12

1000 GARIBALDI PCB SAMPLING
109 ARLINGTON SAMPLE

(36) 10/23/12

1400 COLLECT CDE-OU1-1000GAR-FYL-037 AT 12" BLS. SAMPLE LOCATION IS 2' INTO THE YARD FROM THE SIDEWALK, AND 9' ~~FROM~~ SOUTH OF THE #025 LOCATION. 1-8oz CLEAR GLASS JAR FILLED FOR TOTAL PCB + 1262/1268 ANAL 4515.

1410 COLLECT CDE-OU1-1000GAR-FYL-038 AT 12" BLS - FILL 1-8oz JAR FOR PCB + ANAL 4515. CONTINUE AUGERING TO COLLECT:

1420 CDE-OU1-1000GAR-FYL-039 AT 24" BLS. SAMPLE LOCATION IS 4' INTO THE YARD, 4' FROM #025 SAMPLE.

1430 COLLECT CDE-OU1-1000GAR-FYL-040 AT 12" BLS. SAMPLE LOCATION IS 2' INTO THE YARD FROM SIDEWALK, AND 9' TO NORTH OF #025 LOCATION 4" FROM STONE SCALLOPING ALONG DRIVEWAY.

ALL SAMPLES TO BE SHIPPED TO MITKEM LABS.

1445 MOVE TO 109 ARLINGTON EXCAVATION.

ADDITIONAL 2' EXCAVATION INTO 109 ARLINGTON PROPERTY. MACHINE IS DIGGING FROM 108 DELMORE PROPERTY.

1500 COLLECT CDE-OU1-109ARL-041 SAMPLE AT 12" BLS IN SIDEWALL HEADING INTO 109 ARLINGTON PROP. SAMPLE IS 2' SOUTH OF #030 LOCATION WICH FAILED AND HAS BEEN EXCAVATED. SEE MAP OU P.19.

[signature] 10/23/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-153

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
24	Info Sample #042 & #044 - 140 Harvard	TEST REPORTS	2	1.4		A	N	F

REMARKS
Sample #042 failed criteria for PCB's at 12.00 ppm
Sample #043 failed criteria for PCB's at 4.10 ppm
Sample #044 failed criteria for PCB's at 1.80 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY
Patrick Nejand, A COR

DATE: 12 Dec 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/06/2012

TRANSMITTAL NO.: 01450A-153

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 01450A

PROJECT TITLE AND LOCATION 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
24	Info Sample #042 & #044 - 140 Harvard	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #042 failed criteria for PCB's at 12.00 ppm
Sample #043 failed criteria for PCB's at 4.10 ppm
Sample #044 failed criteria for PCB's at 1.80 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
16-Nov-12 15:55

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2296
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2296-01	CDE-OU1-140HVD-SW3-042	Soil	25-Oct-12 14:40	26-Oct-12 09:35
L2296-02	CDE-OU1-140HVD-SW4-043	Soil	25-Oct-12 14:50	26-Oct-12 09:35
L2296-03	CDE-OU1-140HVD-SW5-044	Soil	25-Oct-12 15:35	26-Oct-12 09:35

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.

N

INDICATES EXCAVATION AREA FROM 0"-6" BELOW GROUND SURFACE (BGS)

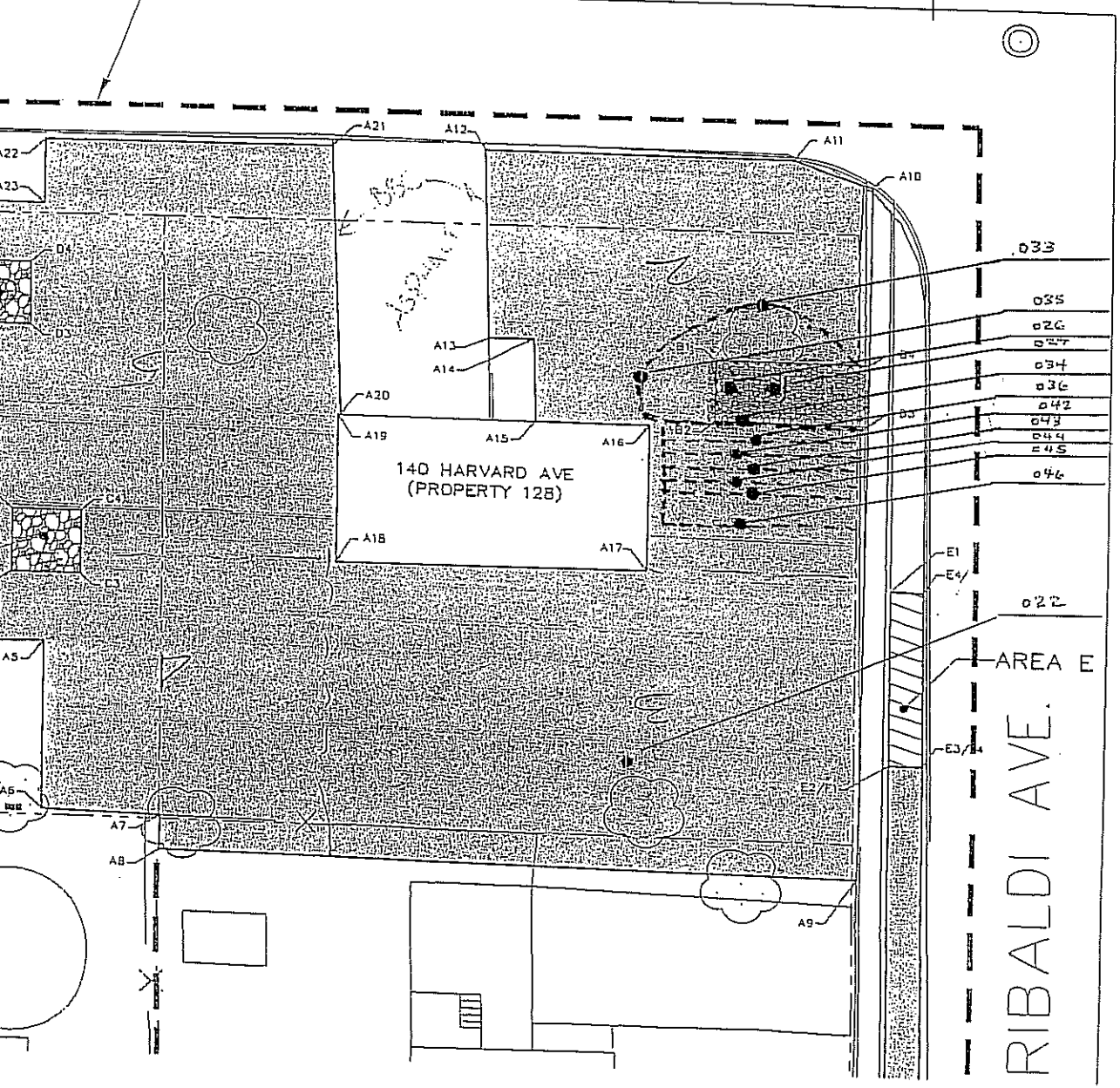
INDICATES EXCAVATION AREA FROM 0"-24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"-48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.



NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.0715	515352.4330
A2	633330.5101	515323.0369
A3	633315.7562	515349.3714
A4	633298.5400	515330.1000
A5	633286.4800	515346.1100
A6	633283.2055	515339.4275
A7	633252.8232	515342.2716
A8	633248.1220	515330.0560
A9	633180.0770	515420.1090
A10	633280.2050	515487.2504
A11	633280.2811	515486.3043
A12	633310.3041	515444.0152
A13	633291.5100	515427.4000
A14	633287.0560	515432.7710
A15	633278.5905	515425.0075
A16	633266.9622	515430.3356
A17	633247.6415	515424.2431
A18	633273.3866	515387.9890
A19	633293.1524	515402.2706
A20	633292.0485	515402.5504
A21	633329.1900	515426.8000
A22	633353.4050	515392.9260
A23	633345.2200	515386.8100
B1	633270.3723	515452.4750
B2	633262.2023	515446.5981
B3	633249.7510	515464.4403
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	633298.4764	515347.8016

REV

No

PROJECT NAME

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-S
W3-042

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2296 Mod. Ref No.: SDG No.: SL2296

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2296-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3J6599F.D/E3J6599R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/26/2012

Extraction: (Type) SONC Date Extracted: 10/26/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/29/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 50.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	2000	U
11104-28-2	Aroclor-1221	2000	U
11141-16-5	Aroclor-1232	2000	U
53469-21-9	Aroclor-1242	2000	U
12672-29-6	Aroclor-1248	2000	U
11097-69-1	Aroclor-1254	12000	P
11096-82-5	Aroclor-1260	2000	U
37324-23-5	Aroclor-1262	2000	U
11100-14-4	Aroclor-1268	2000	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-S
W4-043

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2296 Mod. Ref No.: SDG No.: SL2296

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2296-02A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E3J6600F.D/E3J6600R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 10/26/2012

Extraction: (Type) SONC Date Extracted: 10/26/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/29/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	790	U
11104-28-2	Aroclor-1221	790	U
11141-16-5	Aroclor-1232	790	U
53469-21-9	Aroclor-1242	790	U
12672-29-6	Aroclor-1248	790	U
11097-69-1	Aroclor-1254	4100	
11096-82-5	Aroclor-1260	790	U
37324-23-5	Aroclor-1262	790	U
11100-14-4	Aroclor-1268	790	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-140HVD-S
W5-044

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2296 Mod. Ref No.: SDG No.: SL2296

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2296-03A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E3J6601F.D/E3J6601R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 10/26/2012

Extraction: (Type) SONC Date Extracted: 10/26/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/29/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	370	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	1800	
11096-82-5	Aroclor-1260	370	U
37324-23-5	Aroclor-1262	370	U
11100-14-4	Aroclor-1268	370	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2296 Mod. Ref No.: SDG No.: SL2296

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-69066	84		92		84		91				0
02	LCS-69066	90		99		86		94				0
03	CDE-OU1-140H VD-SW3-042	0	D	0	D	0	D	0	D			4
04	CDE-OU1-140H VD-SW4-043	0	D	0	D	0	D	0	D			4
05	CDE-OU1-140H VD-SW5-044	86		87		105		94				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/25/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/25/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/25/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: OVERCAST, 62°F, CALM, 82% RH.

Subcontractors Present Onsite: LAYOUT - SURVEY SUBCONTRACTOR.

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS DISCUSSED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, BACKFILL, SAMPLING.

Description of Chemical Data Acquisition Work Performed: COLLECTED ADDITIONAL PCB SOIL SAMPLES AT 140 HARVARD AVE PROPERTY, AREA 1, SOUTH WALL EXTENSION. 3 PCB SOIL SAMPLES. TOTAL PCB ANALYSIS, PLUS 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 10/25/12 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/25/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/25/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/25/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[signature]	10/25/12
CQC Systems Manager	[signature]	[signature]	10/28/12

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABORATORIES (SPECTRUM)

Fax Number: 401 732 3499

Phone Number: 401 732 3400

From: ERIC TSCHUDI

Date: 10/25/12

Subject: SOIL SAMPLES (3) PCR ANALYSIS

Pages: 4

Comments:

COC, FEDEX AIRBILL, RECEIPT.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HR.
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials 2 OZ	# of Amber Glass	# of Clear Glass 8 OZ	# of Plastic	TOTAL PCBs + 1242 AND 1268	Analyses							
	140HVD-SW3-042	10/25/12	1440	G	SO			1										
	140HVD-SW4-043	10/25/12	1450	G	SO			1										
	140HVD-SW5-044	10/25/12	1535	G	SO			1										
	TEMP. BLANK					1												

☒ E-mail ~~to~~ ~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~ KLICKFIELD@SEVENSON.COM

Relinquished by:	Received by:	Date:	Time:
[signature]	FEDEX	10/25/12	1800

Condition upon receipt: ☐ Iced ☐ Ambient ☐ Gel

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201210150325

Ship Date: 25OCT12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD

WARWICK, RI 02886

FRI - 26 OCT A1
PRIORITY OVERNIGHT

TRK# 7939 3544 1246
0201

ZA NCOA

02886
RI-US
PVD

515GI/9CCB/AA44

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
175 METRO CENTER BLVD	333 Hamilton Blvd
WARWICK, RI	South Plainfield, NJ
028861784	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 793935441246
Ship date: 10/25/2012
Estimated shipping charges: 29.54

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SUMMARY:

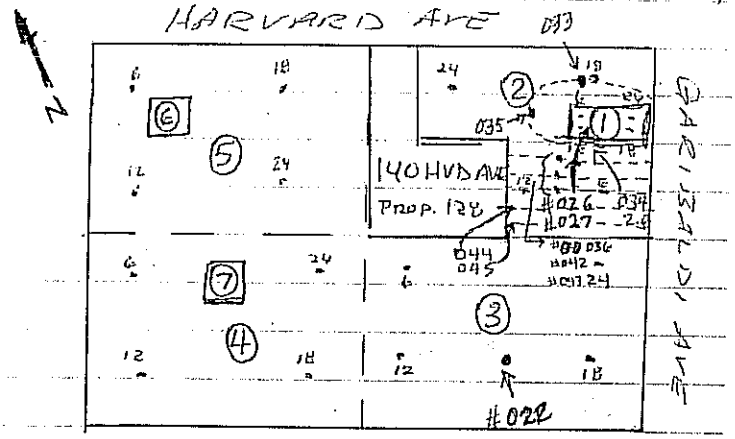
7/18/12 (7)

140 HARVARD AVE

1330 ~~1400~~ PARTLY CLOUDY, HUMID 96°F.

E. TSCHUDI PREPARES FOR HAND AUGER SAMPLING AT 140 HARVARD AVE, SOUTH PLAINFIELD, NJ. 07080. (PROPERTY 128).

INFORMED HOME OWNER I AM ON PROPERTY.



SAMPLE MAP NUMBER	DATE/TIME		SAMPLE CODE
1	7/24/12 ~~7/18/12~~	1500 ~~1515~~	CD-WC-140HVD-01-001
2	7/24/12 ~~7/18/12~~	1550 ~~1650~~	CD-WC-140HVD-02-002
3	7/24/12 ~~7/23/12~~	1330 ~~1450~~	CD-WC-140HVD-03-003
4	7/24/12 ~~7/23/12~~	1400 ~~1600~~	CD-WC-140HVD-04-004
5	7/24/12	1430 ~~0945~~	CD-WC-140HVD-05-005
6	7/24/12	0950	CD-WC-140HVD-06-006
7	7/24/12	1010	CD-WC-140HVD-07-007

WEATHER: VERY WARM - 96-98°F.

7/18/12 "Rain in the Rain"

140 HARVARD AVE. PCB SAMPLING

WEATHER: OVERCAST, 62°F, CALM, 82% RH 10/25/12 (37)

SET UP AT 140 HARVARD TO COLLECT ADDITIONAL WALL SAMPLES AT AREA 1 - SOUTH WALL.

... SW2-036 FAILED AT 11 PPM. THEREFORE, SES HAS BEEN INSTRUCTED BY PATRICK NEJAND, USACE TO EXCAVATE TEST PITS (2) AT 2' INTERVALS TO COLLECT 2 ADDITIONAL SAMPLES. SAMPLES WILL BE COLLECTED AT 4.5' BLS. AND WILL BE LABELED CDE-OU1-140HVD-SW3-042 AND CDE-OU1-140HVD-SW4-043. #043 WILL BE PUT ON HOLD WITH THE LAB PENDING THE RESULT OF #042. CORRECTION: 043 AND 042 WILL BOTH BE RUN FOR 24 TAT. NO HOLD.

1430 BEGIN ADDITIONAL EXCAVATION OF AREA 1 SOUTH WALL. EXCAVATE A TRENCH THAT RUNS PERPENDICULAR TO THE SOUTH WALL IN A SOUTH DIRECTION 2'.

1440 COLLECT CDE-OU1-140HVD-SW3-042 AT 4.5' BLS. MATERIAL IS HARD SHALE, CLAY AND CLAYEY SAND WITH BLACK STAINING ON THE SHALE.

1450 COLLECT CDE-OU1-140HVD-SW4-043 AT 4.5 BLS. MATERIAL LOOKS SAME AS DESCRIBED ABOVE. 2' FURTHER SOUTH IN TRENCH

1520 COLLECT CDE-OU1-140HVD-SW5-044 AT 4.5 bls AN ADDITIONAL 4' BACK (SOUTH) FROM SOUTH WALL CURRENT LOCATION. (6' BACK FROM FACE OF HOUSE 14' FROM SIDE OF HOUSE)

[signature] 10/25/12 "Rite in the Rain"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 01/28/2013	TRANSMITTAL NO. 01450A-193

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO:	FROM:	CONTRACT NO.	CHECK ONE:
Environmental Residency US Army Corps of Engineers 214 State Highway 18 East Brunswick, NJ 08816	Sevenson Environmental Services 2749 Lockport Road Niagara Falls, NY 14305	W912DQ-10-D-3006 0002	[X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION	CHECK ONE: THIS TRANSMITTAL IS
01450A	01-Main Register Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080	FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
25	Info Sample #045 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	C*

REMARKS
Sample failed criteria for PCB's at 1.80 ppm
The criteria is <1 ppm

Indicate action taken as result of failure. i.e. additional excavation conducted

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

[signature]
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Patrick Negrand, ACOR [signature]	31 Jan 2013

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 01/28/2013

TRANSMITTAL NO.: 01450A-193

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
25	Info Sample #045 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 1.80 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
21-Nov-12 11:46

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2336
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2336-01	CDE-140HVD-SW6-045	Soil	05-Nov-12 13:45	06-Nov-12 12:15
~~L2336-02~~	~~CDE-140HVD-SW7-046~~	~~Soil~~	~~05-Nov-12 14:00~~	~~06-Nov-12 12:15~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LA00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

FORM I - ANALYSIS DATA SHEET
SW846 8082A

CDE-140HVD-SW6-045

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	59375
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L2336			Received:	11/06/12 10:15
Matrix:	Soil	Laboratory ID:	SB59375-01	File ID:	5937501P.D
Sampled:	11/05/12 13:45	Prepared:	11/06/12 11:23	Analyzed:	11/07/12 02:18
% Solids:	86.27	Preparation:	SW846 3545A	Initial/Final:	10.3703 g / 10 ml

Batch: 1227230 Sequence: S213813 Calibration: 1210031 Instrument: HPS12

Injection Volume (uL): 2.00

Reported to: MDL Dilution: 1

CAS NO.	COMPOUND	RESULT (µg/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor-1016	11.2	11.2	22.4	U
11104-28-2	Aroclor-1221	20.1	20.1	22.4	U
11141-16-5	Aroclor-1232	14.4	14.4	22.4	U
53469-21-9	Aroclor-1242	13.2	13.2	22.4	U
12672-29-6	Aroclor-1248	11.0	11.0	22.4	U
11097-69-1	Aroclor-1254	1750	9.49	22.4	
11096-82-5	Aroclor-1260	8.57	8.57	22.4	U
37324-23-5	Aroclor-1262	20.8	20.8	22.4	U
11100-14-4	Aroclor-1268	7.02	7.02	22.4	U

1.0 Parkl

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/05/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11/05/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MORNING; CLOUDY, 37°F.
AFTERNOON; CLEAR SKIES, 47°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PROPER PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT RESIDENTIAL PROPERTIES. BACK FILL OF EXCAVATIONS AT RESIDENTIAL PROPERTIES.

Description of Chemical Data Acquisition Work Performed: COLLECTED TWO (2) ADDITIONAL SOIL SAMPLES WITHIN THE AREA 1 - SOUTH WALL EXCAVATION AT 1110 HARVARD AVE.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE. SAMPLES SHIPPED TO ALTERNATE LAB TO ACHEIVE 24HOUR TAT. SEE SHIPPING PAPERWORK ATTACHED.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 11/05/12 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/05/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

11/05/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/05/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

_____

_____

_____

Sevenson Project Manager_____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		11/05/12
CQC Systems Manager			11-5-12

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABS

Fax Number: 401 732 3400

Phone Number: 401 732 3499

From: ERIC TSCHUDI

Date: 11/05/12

Subject: COC, FEDEX AIRBILL, RECEIPT

Pages: 4

Comments:

PLEASE CALL WITH QUESTIONS.

NOTE: SAMPLES SHIPPED TO AGAWAM, MA. LAB AS PER JIM STADELMAIER.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695501

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G287-9601 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	CDE-DUI- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs PLUS 1262/1268	TEMPERATURE						
	140HVD-SW6-045	11/05/12	1345	G	SO			1		X							
	140HVD-SW7-046	11/06/12	1400	G	SO			1		X							
	TEMP BLANK					1					X						

Containers

Analyses

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
~~EDD Format~~ K.LICKFIELD@SEVENSON.COM
ANOVAK@SEVENSON.COM

Relinquished by:	Received by:	Date	Time
ERIC TSCHUDI	FED EX	11/05/12	1800

Condition upon receipt: ☐ Ice ☐ Ambient ☐ NC

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201209200325

Ship Date: 05NOV12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (413) 789-9018

BILL SENDER

Sample Receiving
Spectrum Analytical
11 ALMGREN DR

AGAWAM, MA 01001

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 06 NOV A2
PRIORITY OVERNIGHT

TRK# 7940 0361 4998
0201

ZB EHTA

01001
MA-US
BDL

515G1/6713/AA44

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Spectrum Analytical	Sevenson Environmental
11 ALMGREN DR	333 Hamilton Blvd
AGAWAM, MA	South Plainfield, NJ
01001-3831	07080
US	US
4137899018	9087695301

Shipment Information:
Tracking no.: 794003614998
Ship date: 11/05/2012
Estimated shipping charges: 20.93

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Contact FedEx for courier pickup

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

140 HARVARD AVENUE

(38) 11/05/12 PCB SAMPLING.

WEATHER: CLOUDY 37°F. - 0800

A REVIEW OF THE PCB RESULTS FROM THE PREVIOUS SAMPLES COLLECTED AT 140 HVD, ON 10/25/12 SHOWS ALL 3 SOUTH WALLS COLLECTED ON THAT DAY HAD RESULTS GREATER THAN THE 1 PPM CLEANUP CRITERIA. TODAY, SES HAS REMOVED - ERCA - VATED - THE ADDITIONAL MATERIAL WHICH WAS REPRESENTATIVE OF THE FAILED SAMPLES. THE SOUTH WALL OF AREA 1 CONTINUES TO FAIL - ADDITIONAL SAMPLE(S) WILL BE COLLECTED TODAY AT AN ADDITIONAL 2 FEET EXTENSION OF THE SOUTH WALL. AS OF 1030, STILL WAITING USACE DIRECTION TO CONTINUE EXCAVATION AND WHERE TO COLLECT NEXT SAMPLE. SO FAR, THE SOUTH WALL OF AREA 1 HAS BEEN SAMPLED 6 TIMES - EACH FAILING THE 1 PPM CLEANUP CRITERIA.

1330 - E. TSCHUDI ENTERS EXCL. ZONE AT 140 HARVARD AVE. WITH P. NOVAK AND P. NEJAND - USACE TO IDENTIFY

140 HARVARDALE
PCB SAMP.

11/05/12 CLEAR SKIES - (39)

THE NEXT SOIL SAMPLE LOCATIONS. OPERATOR HAS EXCAVATED AN ADDITIONAL 2 FEET OF THE SOUTH WALL OF AREA 1.

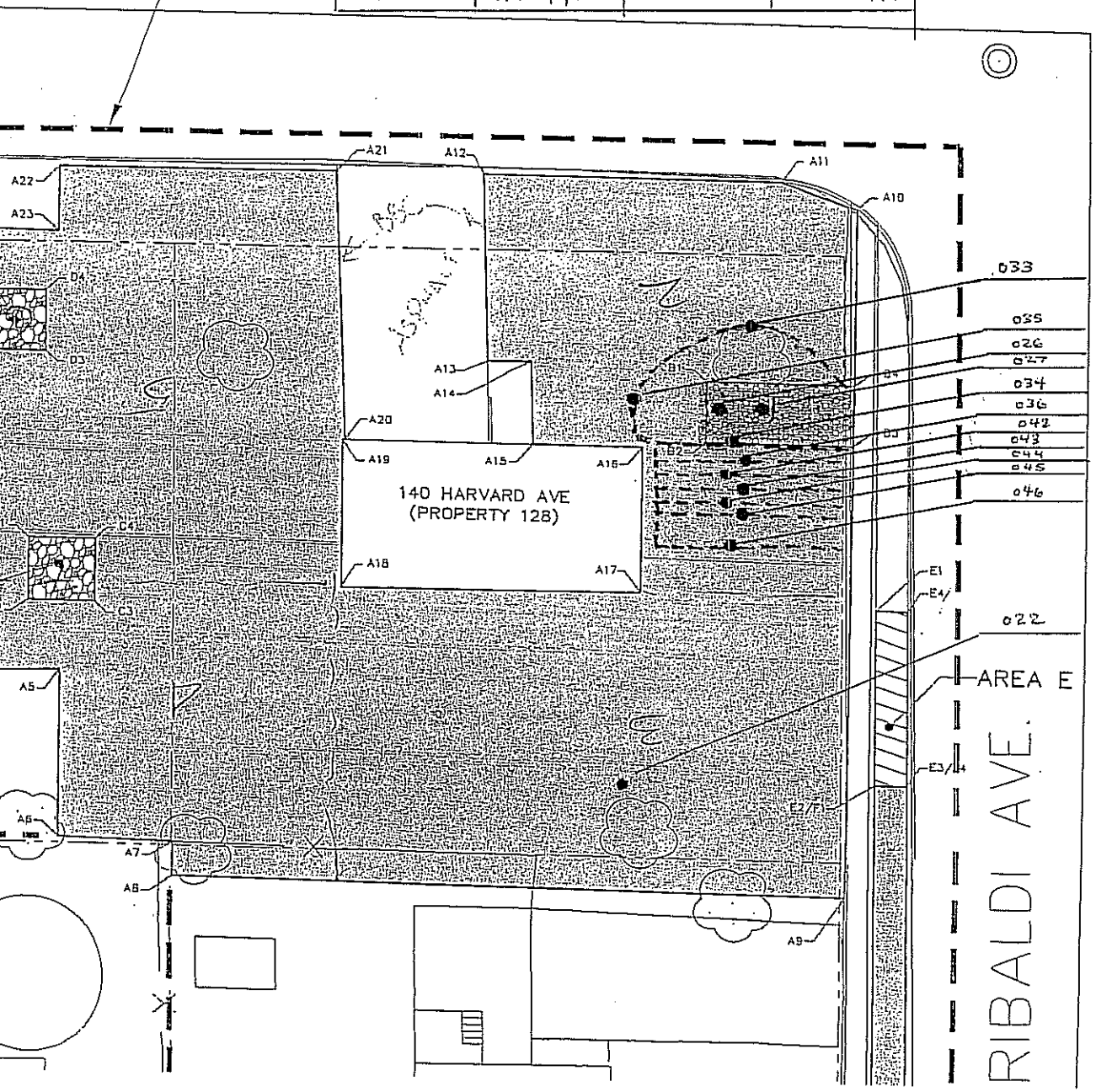
1345 COLLECT CDE-001-140HVA-SW6-045 AT P. NEJAND'S DIRECTION. SAMPLE DEPTH APPROX. 4.5 BLS. P. NOVAK INSTRUCTS OPERATOR TO EXCAVATE A TRENCH 8' BACK - PERPENDICULAR TO THE SOUTH WALL FACE.

1400 COLLECT CDE-001-140HVD-SW7-046 MATERIAL APPEAR TO BE THE SAME; REDDISH BROWN, SANDY CLAY, WITH AREAS OF DARK BLACK "STAINING" OF UNKNOWN MATERIAL, ALL WITHIN TIGHT, ~~FRACTURED~~ FRACTURED SHALE. SAMPLES INTO 8 OZ GLASS JAR. LABELED - PROCESSED SHIPPED TO MITKEM LABS FOR 24 HOUR T.A.T. SEE P. 24. FOR LAB INFO.

11/05/12

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.0715	515352.4330
A2	633330.5101	515323.0369
A3	633315.7367	515343.3714
A4	633298.5400	515330.1000
A5	633286.4800	515345.1150
A6	633263.2055	515328.4225
A7	633252.6232	515342.2716
A8	633248.1220	515338.0560
A9	633189.0720	515420.1050
A10	633280.3050	515487.2504
A11	633290.2811	515480.3043
A12	633318.3941	515444.0152
A13	633291.5100	515427.4000
A14	633287.0560	515432.7710
A15	633278.5005	515425.0675
A16	633266.9622	515430.3356
A17	633247.0415	515424.2431
A18	633273.3806	515387.9890
A19	633293.1524	515402.2706
A20	633292.0405	515402.6504
A21	633329.1900	515426.8000
A22	633353.4050	515392.9260
A23	633345.2700	515386.8100
B1	633270.3723	515452.4759
B2	633287.2022	515440.5981
B3	633249.7510	515464.4401
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	633298.4764	515347.0016

REV

No

PROJECT NAME

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 01/28/2013	TRANSMITTAL NO. 01450A-194

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO:	FROM:	CONTRACT NO.	CHECK ONE:
Environmental Residency US Army Corps of Engineers 214 State Highway 18 East Brunswick, NJ 08816	Sevenson Environmental Services 2749 Lockport Road Niagara Falls, NY 14305	W912DQ-10-D-3006 0002	[X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION	CHECK ONE: THIS TRANSMITTAL IS
01450A	01-Main Register Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080	FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
26	Final Sample #046 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	C*

REMARKS
Sample #046 passed criteria for PCB's at 0.1 ppm
The criteria is <1 ppm

Provide sketch showing compliance with NJDEP Tech Reg for sampling

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

[signature]
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Patrick Nejand, ACOR [signature]	31 Jan 2013

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 01/28/2013

TRANSMITTAL NO.: 01450A-194

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
26	Final Sample #046 - 140 Harvard Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #046 passed criteria for PCB's at 0.1 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
21-Nov-12 11:46

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: L2336
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~L2336-01~~	~~CDE-140HVD-SW7-045~~	~~Soil~~	~~05-Nov-12 14:45~~	~~06-Nov-12 12:15~~
L2336-02	CDE-140HVD-SW7-046	Soil	05-Nov-12 14:00	06-Nov-12 12:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

FORM I - ANALYSIS DATA SHEET
SW846 8082A

CDE-140HVD-SW7-046

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	59375
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L2336			Received:	11/06/12 10:15
Matrix:	Soil	Laboratory ID:	SB59375-02	File ID:	5937502P.D
Sampled:	11/05/12 14:00	Prepared:	11/06/12 11:23	Analyzed:	11/07/12 02:27
% Solids:	88.02	Preparation:	SW846 3545A	Initial/Final:	10.2974 g / 10 ml

Batch: 1227230 Sequence: S213813 Calibration: 1210031 Instrument: HPS12

Injection Volume (uL): 2.00

Reported to: MDL Dilution: 1

CAS NO.	COMPOUND	RESULT (µg/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor-1016	11.0	11.0	22.1	U
11104-28-2	Aroclor-1221	19.9	19.9	22.1	U
11141-16-5	Aroclor-1232	14.2	14.2	22.1	U
53469-21-9	Aroclor-1242	13.0	13.0	22.1	U
12672-29-6	Aroclor-1248	10.8	10.8	22.1	U
11097-69-1	Aroclor-1254	58.5	16.2	22.1	
11096-82-5	Aroclor-1260	8.46	8.46	22.1	U
37324-23-5	Aroclor-1262	20.6	20.6	22.1	U
11100-14-4	Aroclor-1268	6.93	6.93	22.1	U

0.1

Passed

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/05/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11/05/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MORNING; CLOUDY, 37°F.
AFTERNOON; CLEAR SKIES, 47°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PROPER PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT RESIDENTIAL PROPERTIES. BACK FILL OF EXCAVATIONS AT RESIDENTIAL PROPERTIES.

Description of Chemical Data Acquisition Work Performed: COLLECTED TWO (2) ADDITIONAL SOIL SAMPLES WITHIN THE AREA 1 - SOUTH WALL EXCAVATION AT 140 HARVARD AVE.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE. SAMPLES SHIPPED TO ALTERNATE LAB TO ACHEIVE 24HOUR TAT. SEE SHIPPING PAPERWORK ATTACHED.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 11/05/12 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/05/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

11/05/12

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/05/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	ERIC TSCHUDI		11/05/12
CQC Systems Manager			11-5-12

Sevenson Environmental Services, Inc.

Cornell-Dubilier Superfund Site
333 Hamilton Blvd.
South Plainfield, NJ 07080
Phone # (908) 769-5301
Fax # (908) 769- 5303

FACSIMILE TRANSMITTAL

Name: AGNES HUNTLEY

Organization: MITKEM LABS

Fax Number: 401 732 3400

Phone Number: 401 732 3499

From: ERIC TSCHUDI

Date: 11/05/12

Subject: COC, FEDEX AIRBILL, RECEIPT

Pages: 4

Comments:

PLEASE CALL WITH QUESTIONS.

NOTE: SAMPLES SHIPPED TO AGAWAM, MA. LAB

AS PER JIM STADELMAIER.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G287-9601 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: CDE-DUI-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs PLUS 1262/1268	TEMPERATURE							
	140HVD-SW6-045	11/05/12	1345	G	SO			1		X								
	140HVD-SW7-046	11/06/12	1400	G	SO			1		X								
	TEMP BLANK					1					X							

Containers / Analyses

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
~~EDD Format~~ K.LICKFIELD@SEVENSON.COM
ANOVAK@SEVENSON.COM

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI [signature]	FED EX	11/05/12	1800

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1220120920032 5

Ship Date: 05NOV12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (413) 789-9018

BILL SENDER

Sample Receiving
Spectrum Analytical
11 ALMGREN DR

AGAWAM, MA 01001

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 06 NOV A2
PRIORITY OVERNIGHT

TRK# 7940 0361 4998
0201

ZB EHTA

01001
MA-US
BDL

515G1/6713/AA44

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Spectrum Analytical	Sevenson Environmental
11 ALMGREN DR	333 Hamilton Blvd
AGAWAM, MA	South Plainfield, NJ
01001-3831	07080
US	US
4137899018	9087695301

Shipment Information:
Tracking no.: 794003614998
Ship date: 11/05/2012
Estimated shipping charges: 20.93

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Contact FedEx for courier pickup

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

140 HARVARD AVENUE

(38) 11/05/12 PCB SAMPLING.

WEATHER: CLOUDY 37°F. - 0800

A REVIEW OF THE PCB RESULTS FROM THE PREVIOUS SAMPLES COLLECTED AT 140 HVD, ON 10/25/12 SHOWS ALL 3 SOUTH WALLS COLLECTED ON THAT DAY HAD RESULTS GREATER THAN THE 1 PPM CLEANUP CRITERIA. TODAY, SES HAS REMOVED - ERCA - VATED - THE ADDITIONAL MATERIAL WHICH WAS REPRESENTATIVE OF THE FAILED SAMPLES. THE SOUTH WALL OF AREA 1 CONTINUES TO FAIL - ADDITIONAL SAMPLE(S) WILL BE COLLECTED TODAY AT AN ADDITIONAL 2 FEET EXTENSION OF THE SOUTH WALL. AS OF 1030, STILL WAITING USACE DIRECTION TO CONTINUE EXCAVATION AND WHERE TO COLLECT NEXT SAMPLE. SO FAR, THE SOUTH WALL OF AREA 1 HAS BEEN SAMPLED 6 TIMES - EACH FAILING THE 1 PPM CLEANUP CRITERIA.

1330 - E. TSCHUDI ENTERS EXCL. ZONE AT 140 HARVARD AVE. WITH P. NOVAK AND P. NEJAND - USACE TO IDENTIFY

140 HARVARD AVE
PCB SAMP.

11/05/12 CLEAR SKIES - (39)

THE NEXT SOIL SAMPLE LOCATIONS. OPERATOR HAS EXCAVATED AN ADDITIONAL 2 FEET OF THE SOUTH WALL OF AREA 1.

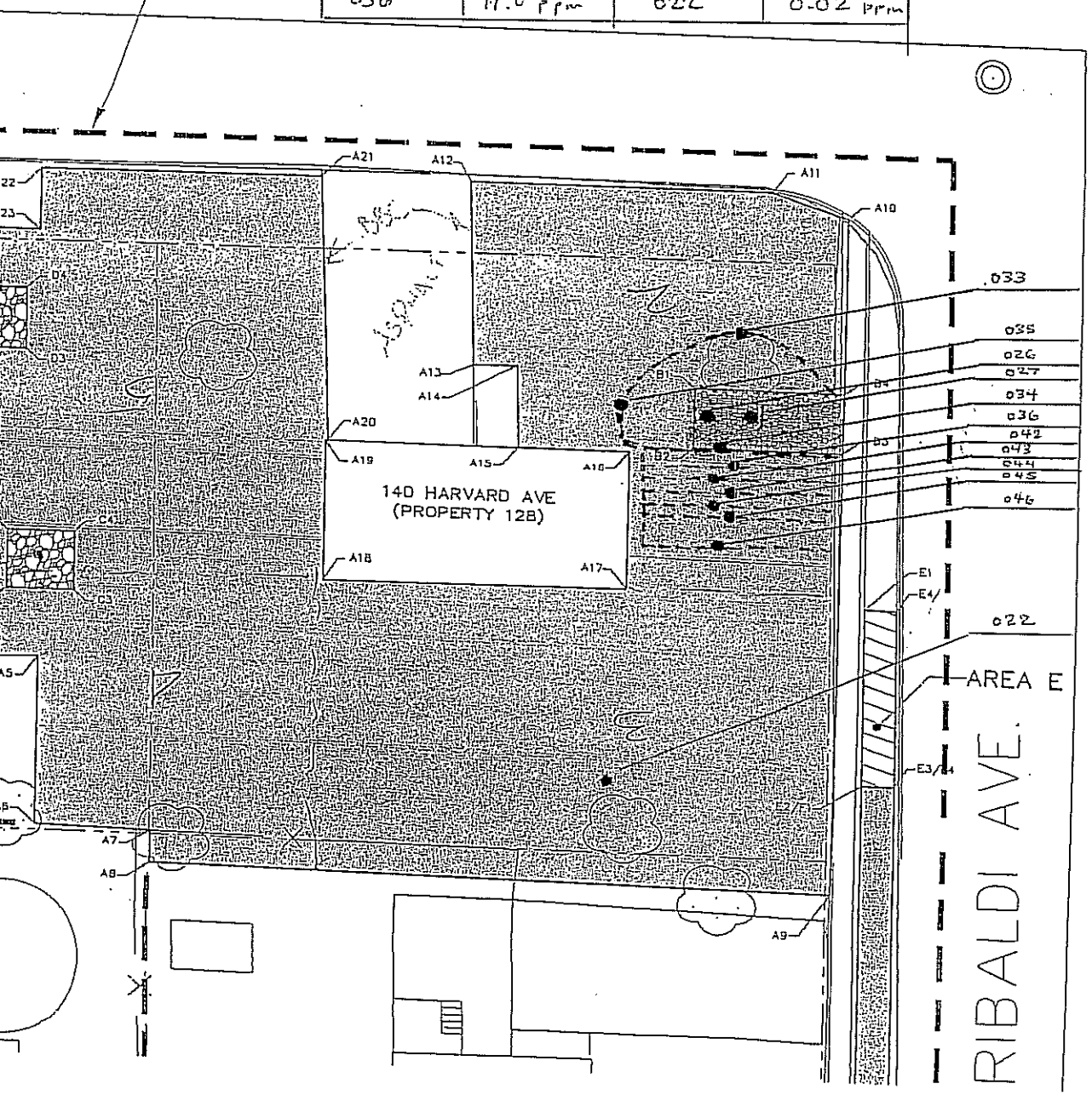
1345 COLLECT CDE-OU1-140HVD-SW6-045 AT P. NEJAND'S DIRECTION. SAMPLE DEPTH APPROX. 4.5 BLS. P. NOVAK INSTRUCTS OPERATOR TO EXCAVATE A TRENCH 8' BACK - PERPENDICULAR TO THE SOUTH WALL FACE.

1400 COLLECT CDE-OU1-140HVD-SW7-046 MATERIAL APPEAR TO BE THE SAME; REDDISH BROWN, SANDY CLAY, WITH AREAS OF DARK BLACK "STAINING" OF UNKNOWN MATERIAL, ALL WITHIN TIGHT, ~~FRACTURED~~ FRACTURED SHALE. SAMPLES INTO 8 OZ GLASS JAR. LABELED - PROCESSED SHIPPED TO MITKEM LABS FOR 24 HOUR T.A.T. SEE P. 24. FOR LAB INFO.

11/05/12

ID#	RESULT	ID#	RESULT
033	0.9 ppm	042	5.4 ppm
035	0.01 ppm	043	2.6 ppm
026	2.9 ppm	044	1.2 ppm
027	2.4 ppm	045	1.7 ppm
034	6.9 ppm	046	0.05 ppm
036	11.0 ppm	022	0.02 ppm

DRAFT SAMPLE LOCATION MAP 140 HARVARD AVE.



INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)

INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a.
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION. COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

NOT TO SCALE

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	Y=NORTHING	X=EASTING
A1	633370.8715	515352.4339
A2	633330.8101	515323.0389
A3	633315.7362	515343.3714
A4	633298.5400	515330.1000
A5	633288.4800	515345.1100
A6	633263.2055	515328.4225
A7	633252.8232	515342.2716
A8	633248.1220	515338.0560
A9	633180.0220	515420.1990
A10	633280.3050	515487.2504
A11	633290.3811	515480.3843
A12	633318.3941	515444.8152
A13	633291.5100	515427.4800
A14	633287.0660	515432.7719
A15	633270.5905	515425.0675
A16	633268.9622	515430.5356
A17	633247.6415	515424.2431
A18	633273.3866	515387.5990
A19	633290.1524	515402.2706
A20	633292.0485	515402.6504
A21	633329.1900	515426.8000
A22	633353.4058	515392.0460
A23	633345.2200	515386.8100
B1	633270.3723	515452.4759
B2	633282.7023	515446.5981
B3	633249.2510	515464.4403
B4	633257.3112	515470.3602
C1	633306.5666	515353.6795
C2	633298.4764	515347.8015

REV

PROJECT NAME

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 01/28/2013

TRANSMITTAL NO.: 01450A-195

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
27	Final Sample #047-#049 109 Arlington Ave	TEST REPORTS	2	1.4		A	N	B*

REMARKS
Sample #047 passed criteria for PCB's at 0.7 ppm
Sample #048 passed criteria for PCB's at 0.5 ppm
Sample #049 passed criteria for PCB's at 0.3 ppm
The criteria is <1 ppm

Provide Sketch showing compliance with NJDEP Tech Reg for each completed property

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, ACOR

DATE: 31 Jan 2013

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 01/28/2013

TRANSMITTAL NO.: 01450A-195

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
27	Final Sample #047-#049 109 Arlington Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #047 passed criteria for PCB's at 0.7 ppm
Sample #048 passed criteria for PCB's at 0.5 ppm
Sample #049 passed criteria for PCB's at 0.3 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
26-Nov-12 22:04

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L2348
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2348-01	CDE-OU1-109ARL-NW2-047	Soil	06-Nov-12 00:00	07-Nov-12 16:11
L2348-02	CDE-OU1-109ARL-NW3-048	Soil	06-Nov-12 00:00	07-Nov-12 16:11
L2348-03	CDE-OU1-109ARL-NW4-049	Soil	06-Nov-12 00:00	07-Nov-12 16:11

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

FORM I - ANALYSIS DATA SHEET
SW846 8082A

CDE-OU1-109ARL-NW2-047

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	59485
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L2348			Received:	11/07/12 16:19
Matrix:	Soil	Laboratory ID:	SB59485-01	File ID:	5948501P.D
Sampled:	11/06/12 00:00	Prepared:	11/08/12 08:52	Analyzed:	11/08/12 22:51
% Solids:	88.14	Preparation:	SW846 3545A	Initial/Final:	10.2173 g / 10 ml

Batch: 1227502 Sequence: S213997 Calibration: 1211005 Instrument: HPS11

Injection Volume (uL): 2.00

Reported to: MDL Dilution: 1

CAS NO.	COMPOUND	RESULT (µg/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor-1016	11.1	11.1	22.2	U
11104-28-2	Aroclor-1221	20.0	20.0	22.2	U
11141-16-5	Aroclor-1232	14.3	14.3	22.2	U
53469-21-9	Aroclor-1242	13.1	13.1	22.2	U
12672-29-6	Aroclor-1248	54.5	54.5	111	U
11097-69-1	Aroclor-1254	81.5	81.5	111	U
11096-82-5	Aroclor-1260	490	8.51	22.2	
37324-23-5	Aroclor-1262	20.7	20.7	22.2	U
11100-14-4	Aroclor-1268	6.97	6.97	22.2	U

0.7
Rand

FORM I - ANALYSIS DATA SHEET

SW846 8082A

CDE-OU1-109ARL-NW3-048

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	59485
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L2348			Received:	11/07/12 16:19
Matrix:	Soil	Laboratory ID:	SB59485-02	File ID:	5948502P.D
Sampled:	11/06/12 00:00	Prepared:	11/08/12 08:52	Analyzed:	11/09/12 00:23
% Solids:	83.68	Preparation:	SW846 3545A	Initial/Final:	10.1619 g / 10 ml

Batch: 1227502 Sequence: S213997 Calibration: 1211005 Instrument: HPS11

Injection Volume (uL): 2.00

Reported to: MDL Dilution: 1

CAS NO.	COMPOUND	RESULT (µg/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor-1016	11.8	11.8	23.5	U
11104-28-2	Aroclor-1221	21.2	21.2	23.5	U
11141-16-5	Aroclor-1232	15.1	15.1	23.5	U
53469-21-9	Aroclor-1242	13.9	13.9	23.5	U
12672-29-6	Aroclor-1248	57.7	57.7	118	U
11097-69-1	Aroclor-1254	86.3	86.3	118	U
11096-82-5	Aroclor-1260	323	9.02	23.5	
37324-23-5	Aroclor-1262	21.9	21.9	23.5	U
11100-14-4	Aroclor-1268	7.38	7.38	23.5	U

0.5
Pacu

FORM I - ANALYSIS DATA SHEET
SW846 8082A

CDE-OU1-109ARL-NW4-049

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	59485
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L2348			Received:	11/07/12 16:19
Matrix:	Soil	Laboratory ID:	SB59485-03	File ID:	5948503P.D
Sampled:	11/06/12 00:00	Prepared:	11/08/12 08:52	Analyzed:	11/09/12 00:39
% Solids:	84.08	Preparation:	SW846 3545A	Initial/Final:	10.4052 g / 10 ml

Batch: 1227502 Sequence: S213997 Calibration: 1211005 Instrument: HPS11

Injection Volume (uL): 2.00

Reported to: MDL Dilution: 1

CAS NO.	COMPOUND	RESULT (µg/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor-1016	11.4	11.4	22.9	U
11104-28-2	Aroclor-1221	20.6	20.6	22.9	U
11141-16-5	Aroclor-1232	14.7	14.7	22.9	U
53469-21-9	Aroclor-1242	13.5	13.5	22.9	U
12672-29-6	Aroclor-1248	56.1	56.1	114	U
11097-69-1	Aroclor-1254	83.8	83.8	114	U
11096-82-5	Aroclor-1260	112	10.2	22.9	
37324-23-5	Aroclor-1262	21.3	21.3	22.9	U
11100-14-4	Aroclor-1268	7.18	7.18	22.9	U

0.3

Passed

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/06/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

11/06/12

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11/06/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLEAR SKIES, 36°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: CONTAMINATION CONTROLS, PPE REQUIREMENTS OBSERVED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION / BACKFILL.

Description of Chemical Data Acquisition Work Performed: COLLECTED (3) THREE SOIL SAMPLES AT 109 ARLINGTON PROPERTY, ALONG ~~A~~ BACK PROPERTY LINE ADJACENT TO 108 DELMORE AVE. EXCAVATION.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO ALTERNATE LAB LOCATION. SEE ATTACHMENTS.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: ET - NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11/06/12

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/06/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC BCHUDI

[signature]

Date

11/06/12

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11/06/12

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

_____

_____

_____

Sevenson Project Manager_____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	11/06/12
CQC Systems Manager	William Zaabraa	[illegible]	11-6-12

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 TAT
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278.9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Preservative Code below

Container / Analysis

Lab Id:	Sample Id: CDE-001-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262/1268	TEMPERATURE
	109ARL-NW2-047	11/06/12		G	SO			1		X	
	109ARL-NW3-048	11/06/12		G	SO			1		X	
	109ARL-NW4-049	11/06/12		G	SO			1		X	
	TEMP BLANK					1					X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to ETSCHUDI@SEVENSON.COM
~~EDD Format~~ KLICKFIELD@SEVENSON.COM
ANOVAK@SEVENSON.COM

Relinquished: ERIC TSCHUDI

Received: FED EX

Date: 11/06/12 Time: 1800

Condition upon receipt: ☐ Ice ☐ Ambient ☐ NC

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J12201209200325

Ship Date: 06NOV12
ActWgt: 15.0 LB
CAD: 102252634/INET3300

Delivery Address Bar Code

SHIP TO: (413) 789-9018

BILL SENDER

Sample Receiving
Spectrum Analytical
11 ALMGREN DR

AGAWAM, MA 01001

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 07 NOV A2
PRIORITY OVERNIGHT

TRK# 7940 0886 9796
0201

ZB EHTA

01001
MA-US
BDL

515G1/6713/AA44

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Spectrum Analytical	Sevenson Environmental
11 ALMGREN DR	333 Hamilton Blvd
AGAWAM, MA	South Plainfield, NJ
010013831	07080
US	US
4137899018	9087695301

Shipment Information:
Tracking no.: 794008869796
Ship date: 11/06/2012
Estimated shipping charges: 20.93

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(40) 11/06/12 109 ARLINGTON PCB SAMPLING

0630 WEATHER: CLEAR SKIES, 36°F.

AS PER EMAIL FROM DIEGO GARCIA EPA RPM, HE HAS DIRECTED SES TO COLLECT ADDITIONAL SOIL SAMPLES AT 109 ARLINGTON AVE. 3 THREE ADDITIONAL SAMPLES SSW OF SAMPLE #041 LOCATION WHICH HAD RESULTS ABOVE THE CLEAN UP CRITERA. EACH SAMPLE WILL BE COLLECTED AT 2' INTERVALS FROM THE SIDEWALL OF THE EXCAVATION LEADING FROM 108 DELMORE INTO THE 109 ARLINGTON PROPERTY. SEE MAP ON P. 41 FOR REFERENCE.

1000 E. TSCHUDI AND P. SINGH ARRIVE TO 109 PROP. TO COLLECT SOIL SAMPLES USING A CLEAN SHOVEL TO DIG TO 12' BLS THEN USING CLEAN TROWEL TO SAMPLE AT 12" BLS. ALL SAMPLES WILL BE FROM THAT DEPTH, WILL BE IN 8 OZ GLASS JARS 1 EACH, AND LABELED, PROCESSED, ICED PACKED AND SHIPPED TO MITKEM LABS.

1010 COLLECT CDE-OUI-109ARL-~~NW1~~ NW2-047 11/6/12

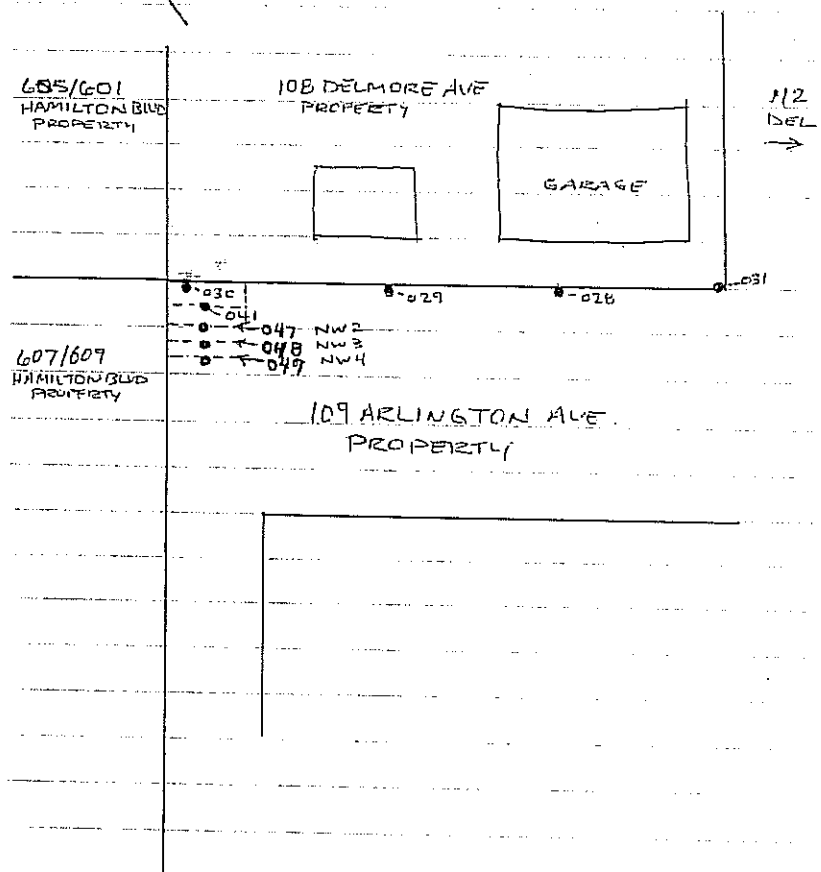
1020 COLLECT CDE-OUI-109ARL-~~NW2~~ NW3-048 11/6/12

1050 COLLECT CDE-OUI-109ARL-~~NW3~~ NW4-049 11/6/12

11/06/12

109 ARLINGTON AVE. SOIL SAMPLE LOCATION MAP (41)

11/06/12



11/06/12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/08/2013

TRANSMITTAL NO.: 01450A-302

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See Instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
28	Waste Deter-135 Tremont Ave Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) CDE-OU1-WC-135TRE-01-56; CDE-OU1-WC-135TRE-02-57; CDE-OU1-WC-135TRE-03-58**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **06/14/13**

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

ADR DATA ASSESSMENT

Laboratory Report Number: M0856

Laboratory: Spectrum Analytical, Inc.

Project: Cornell-Dubilier/G278

Automated Data Review (ADR) has been applied to the laboratory data. All data were found to be valid and acceptable. Data validation qualifiers, if any, were applied as summarized on the attached Sample Qualification Reports. Quality control problems, if any, are summarized on the attached Outlier Reports.

Reviewer's Name: Sidney C. Tyrrell

Reviewer's Signature: Sidney C Tyrrell

Date: 6/12/13

Cornell-Dubilier Electronics Superfund Site
South Plainfield, New Jersey

Spectrum Analytical, Inc.
Sample Delivery Group M0856

Waste Characterization Samples

CDE-0U1-WC-135TRE-01-056
CDE-0U1-WC-135TRE-02-057
CDE-0U1-WC-135TRE-03-058

Report Date:
07-Jun-13 16:17

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Spectrum Analytical, Inc.
646 Camp Ave.
North Kingstown, RI 02852
Attn: Agnes Huntley

Project: Cornell-Dubilier-South Plainfield, NJ
Project #: M0856

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB70612-01	CDE-0U1-WC-135TRE-01-056	Soil	29-May-13 10:40	31-May-13 11:40
SB70612-02	CDE-0U1-WC-135TRE-02-057	Soil	29-May-13 13:20	31-May-13 11:40
SB70612-03	CDE-0U1-WC-135TRE-03-058	Soil	29-May-13 11:00	31-May-13 11:40

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 33 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-01-056 SB70612-01	M0856	Soil	29-May-13 10:40	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed		N/A			1	SW846 1311	05-Jun-13	06-Jun-13	CMB	1313219	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 3.3	U, D	µg/l	5.0	3.3	5	SW846 1311/8260C	07-Jun-13	07-Jun-13	NAA	1313394	X
78-93-3	2-Butanone (MEK)	< 6.7	U, D	µg/l	50.0	6.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 2.7	U, D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 3.3	U, D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 3.4	U, D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 3.9	U, D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 2.4	U, D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 3.7	U, D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 3.8	U, D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4.0	U, D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312852	X
	Final pH of leachate	4.96		N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	"	03-Jun-13	05-Jun-13	"	1312849	X
	Final pH of leachate	4.96		N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535A													
106-46-7	1,4-Dichlorobenzene	< 1.00	U	µg/l	5.00	1.00	1	SW846 1311/8270D	06-Jun-13	06-Jun-13	MSL	1313230	X
121-14-2	2,4-Dinitrotoluene	< 0.940	U	µg/l	5.00	0.940	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 0.930	U	µg/l	5.00	0.930	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.830	U	µg/l	5.00	0.830	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 1.01	U	µg/l	5.00	1.01	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 0.960	U	µg/l	5.00	0.960	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 0.940	U	µg/l	10.0	0.940	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 0.950	U	µg/l	5.00	0.950	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 0.810	U	µg/l	5.00	0.810	1	"	"	"	"	"	X
110-86-1	Pyridine	< 0.970	U	µg/l	5.00	0.970	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 0.830	U	µg/l	5.00	0.830	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 0.780	U	µg/l	5.00	0.780	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*87*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*92*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*92*			*30-130 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	*99*			*30-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-01-055 SB70612-01	M0856	Soil	29-May-13 10:40	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312851	X
	Final pH of leachate	4.96		N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535A													
58-89-9	gamma-BHC (Lindane)	< 0.025	U	µg/l	0.033	0.025	1	SW846 1311/8081B	06-Jun-13	06-Jun-13	TG	1313227	X
76-44-8	Heptachlor	< 0.026	U	µg/l	0.033	0.026	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.025	U	µg/l	0.033	0.025	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.020	U	µg/l	0.022	0.020	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 0.023	U	µg/l	0.033	0.023	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.027	U	µg/l	0.044	0.027	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.023	U	µg/l	0.044	0.023	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 0.018	U	µg/l	0.044	0.018	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.021	U	µg/l	0.044	0.021	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.020	U	µg/l	0.044	0.020	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.020	U	µg/l	0.044	0.020	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.247	U	µg/l	0.556	0.247	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.047	U	µg/l	0.389	0.047	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*116*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*116*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*70*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*84*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 11.8	U	µg/kg dry	23.6	11.8	1	SW846 8082A	04-Jun-13	05-Jun-13	BLM	1312932	X
11104-28-2	Aroclor-1221	< 21.3	U	µg/kg dry	23.6	21.3	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 15.1	U	µg/kg dry	23.6	15.1	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 13.9	U	µg/kg dry	23.6	13.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 11.6	U	µg/kg dry	23.6	11.6	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	3,840		µg/kg dry	23.6	19.7	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260 [2C]	419		µg/kg dry	23.6	10.5	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 22.0	U	µg/kg dry	23.6	22.0	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 7.41	U	µg/kg dry	23.6	7.41	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*100*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*80*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*95*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*95*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535A									Methylation date: 06-Jun-13				
93-72-1	2,4,5-TP (Silvex)	< 0.0633	U	µg/l	0.111	0.0633	1	SW846 1311/8151A	06-Jun-13	07-Jun-13	TG	1313229	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-02-057 SB70612-02	M0856	Soil	29-May-13 13:20	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312851	X
	Final pH of leachate	4.95		N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535A													
58-89-9	gamma-BHC (Lindane)	< 0.025	U	µg/l	0.033	0.025	1	SW846 1311/8081B	06-Jun-13	07-Jun-13	TG	1313227	X
76-44-8	Heptachlor	< 0.026	U	µg/l	0.033	0.026	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.025	U	µg/l	0.033	0.025	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.020	U	µg/l	0.022	0.020	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 0.023	U	µg/l	0.033	0.023	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.027	U	µg/l	0.044	0.027	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.023	U	µg/l	0.044	0.023	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 0.018	U	µg/l	0.044	0.018	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.021	U	µg/l	0.044	0.021	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.020	U	µg/l	0.044	0.020	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.020	U	µg/l	0.044	0.020	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.247	U	µg/l	0.556	0.247	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.047	U	µg/l	0.369	0.047	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*112*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*122*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*60*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*69*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 11.8	U	µg/kg dry	23.7	11.8	1	SW846 8082A	04-Jun-13	05-Jun-13	BLM	1312932	X
11104-28-2	Aroclor-1221	< 21.3	U	µg/kg dry	23.7	21.3	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 15.2	U	µg/kg dry	23.7	15.2	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 13.9	U	µg/kg dry	23.7	13.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 11.6	U	µg/kg dry	23.7	11.6	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254 [2C]	773		µg/kg dry	23.7	10.0	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260 [2C]	110		µg/kg dry	23.7	10.6	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 22.0	U	µg/kg dry	23.7	22.0	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 7.43	U	µg/kg dry	23.7	7.43	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*85*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*75*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*110*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*110*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535A									Methylation date: 06-Jun-13				
93-72-1	2,4,5-TP (Silvex)	< 0.0633	U	µg/l	0.111	0.0633	1	SW846 1311/8151A	06-Jun-13	07-Jun-13	TG	1313229	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-13STRE-02-057 SB70612-02	M0856	Soil	29-May-13 13:20	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Herbicides													
Prepared by method SW846 3535A									Methylation date: 06-Jun-13				
94-75-7	2,4-D	< 0.0933	U	µg/l	0.111	0.0933	1	SW846 1311/8151A	06-Jun-13	07-Jun-13	TG	1313229	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*70*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*70*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
	Oil & Grease	62.5	J,OG	mg/kg dry	95.9	47.8	1	EPA 1664A	05-Jun-13	06-Jun-13	JK	1313057	
	Oil & Grease (ASTM)	< 39.9	U	mg/l	80.0	39.9	1	EPA 1664	05-Jun-13	06-Jun-13	JK	1313058	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312846	X
	Final pH of leachate	5.06		N/A			1	"	"	"	"	"	
TCLP Extraction for Metals													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	"	"	"	"	"	X
	Final pH of leachate	5.06		N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 0.0024	U	mg/l	0.0100	0.0024	1	SW846 1311/6010C	05-Jun-13	06-Jun-13	EDT	1312943	X
7440-38-2	Arsenic	0.0089	R01, J U 6-12-13	mg/l	0.0100	0.0027	1	"	"	"	"	"	X
7440-39-3	Barium	0.401		mg/l	0.0100	0.0012	1	"	"	"	"	"	X
7440-43-9	Cadmium	0.0018	J	mg/l	0.0050	0.0004	1	"	"	07-Jun-13	"	1313340	X
7440-47-3	Chromium	0.0202	U 6-12-13	mg/l	0.0100	0.0016	1	"	"	06-Jun-13	"	1312943	X
7440-50-8	Copper	0.0271		mg/l	0.0100	0.0033	1	"	"	07-Jun-13	"	1313340	X
7439-97-6	Mercury	< 0.00008	U	mg/l	0.00020	0.00008	1	SW846 1311/7470A	"	06-Jun-13	JLM	1312944	X
7440-02-0	Nickel	0.0205		mg/l	0.0100	0.0034	1	SW846 1311/6010C	"	06-Jun-13	EDT	1312943	X
7439-92-1	Lead	0.0656		mg/l	0.0150	0.0042	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0166	U	mg/l	0.0400	0.0166	1	"	"	"	"	"	X
7440-66-6	Zinc	0.181	J U 6-12-13	mg/l	0.280	0.0034	1	"	"	"	"	"	X
General Chemistry Parameters													
	ASTM Leaching	Completed		N/A			1	ASTM D3987-06	03-Jun-13	05-Jun-13	DJB	1312853	
	% Solids	83.4		%			1	SM2540 G Mod.	04-Jun-13	04-Jun-13	DT	1312971	
	Ammonia as N (ASTM)	< 0.165	U	mg/l	0.200	0.165	1	SM4500-NH3-B,C	07-Jun-13	07-Jun-13	ELE	1313399	
	Chemical Oxygen Demand (ASTM)	< 1.62	U	mg/l	5.00	1.62	1	HACH8000	05-Jun-13	05-Jun-13	CAA	1313153	
	Total Solids	264		mg/l	5.00	4.33	1	SM2540 B	04-Jun-13	05-Jun-13	BD	1312979	
	Total Volatile Solids	3.89		%			1	SM2540 G	"	06-Jun-13	BD	1312978	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	03-Jun-13	03-Jun-13	JRF	1312827	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	03-Jun-13 10:10	03-Jun-13 10:50	JRF	1312822	X
	pH	5.59	pH J 6-12-13	pH Units			1	SW846 9045D	31-May-13 15:54	31-May-13 18:17	BD	1312726	
Reactivity Cyanide/Sulfide													
Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	07-Jun-13	07-Jun-13	DJB	1313421	X
	Reactive Cyanide	< 25.0	U	mg/kg dry	25.0	25.0	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-02-057 SB70612-02	M0856	Soil	29-May-13 13:20	31-May-13

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Toxicity Characteristics													
Reactivity Cyanide/Sulfide													
Prepared by method General Preparation													
	Reactive Sulfide	< 50.0	U	mg/kg dry	50.0	50.0	1	SW846 Ch. 7.3	07-Jun-13	07-Jun-13	DJB	1313421	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-03-058 SB70612-03	M0856	Soil	29-May-13 11:00	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed		N/A			1	SW846 1311	05-Jun-13	05-Jun-13	CMB	1313219	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 3.3	U, D	µg/l	5.0	3.3	5	SW846 1311/8260C	07-Jun-13	07-Jun-13	NAA	1313394	X
78-93-3	2-Butanone (MEK)	< 8.7	U, D	µg/l	50.0	8.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 2.7	U, D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 3.3	U, D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 3.4	U, D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 3.9	U, D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 2.4	U, D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 3.7	U, D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 3.8	U, D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4.0	U, D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	97			70-130 %			"	"	"	"	"	
2037-26-5	*Toluene-d8*	99			70-130 %			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	96			70-130 %			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	96			70-130 %			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312852	X
	Final pH of leachate	4.96		N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	"	03-Jun-13	05-Jun-13	"	1312849	X
	Final pH of leachate	4.96		N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535A													
106-46-7	1,4-Dichlorobenzene	< 1.00	U	µg/l	5.00	1.00	1	SW846 1311/8270D	06-Jun-13	06-Jun-13	MSL	1313230	X
121-14-2	2,4-Dinitrotoluene	< 0.940	U	µg/l	5.00	0.940	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 0.930	U	µg/l	5.00	0.930	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.830	U	µg/l	5.00	0.830	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 1.01	U	µg/l	5.00	1.01	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 0.960	U	µg/l	5.00	0.960	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 0.940	U	µg/l	10.0	0.940	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 0.950	U	µg/l	5.00	0.950	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 0.810	U	µg/l	5.00	0.810	1	"	"	"	"	"	X
110-86-1	Pyridine	< 0.970	U	µg/l	5.00	0.970	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 0.830	U	µg/l	5.00	0.830	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 0.780	U	µg/l	5.00	0.780	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	86			30-130 %			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	93			15-110 %			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	92			30-130 %			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	96			30-130 %			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-03-058 SB70612-03	M0856	Soil	29-May-13 11:00	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312851	X
	Final pH of leachate	4.96		N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535A													
58-89-9	gamma-BHC (Lindane)	< 0.026	U	µg/l	0.035	0.026	1	SW846 1311/8081B	06-Jun-13	06-Jun-13	TG	1313227	X
76-44-8	Heptachlor	< 0.028	U	µg/l	0.035	0.028	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.027	U	µg/l	0.035	0.027	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.022	U	µg/l	0.024	0.022	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 0.025	U	µg/l	0.035	0.025	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.028	U	µg/l	0.047	0.028	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.024	U	µg/l	0.047	0.024	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 0.020	U	µg/l	0.047	0.020	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.022	U	µg/l	0.047	0.022	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.021	U	µg/l	0.047	0.021	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.021	U	µg/l	0.047	0.021	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.261	U	µg/l	0.588	0.261	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.050	U	µg/l	0.412	0.050	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*118*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*111*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*67*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*83*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 11.6	U	µg/kg dry	23.1	11.6	1	SW846 8082A	04-Jun-13	05-Jun-13	BLM	1312932	X
11104-28-2	Aroclor-1221	< 20.8	U	µg/kg dry	23.1	20.8	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 14.9	U	µg/kg dry	23.1	14.9	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 13.6	U	µg/kg dry	23.1	13.6	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 11.4	U	µg/kg dry	23.1	11.4	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	4,490		µg/kg dry	23.1	19.3	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260 [2C]	591		µg/kg dry	23.1	10.3	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 21.6	U	µg/kg dry	23.1	21.6	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 7.27	U	µg/kg dry	23.1	7.27	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*103*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*80*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*85*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*88*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535A									Methylation date: 06-Jun-13				
93-72-1	2,4,5-TP (Silvex)	< 0.0651	U	µg/l	0.114	0.0651	1	SW846 1311/8151A	06-Jun-13	07-Jun-13	TG	1313229	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-03-058 SB70612-03	M0856	Soil	29-May-13 11:00	31-May-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Herbicides													
Prepared by method SW846 3535A									Methylation date: 06-Jun-13				
94-75-7	2,4-D	< 0.0960	U	µg/l	0.114	0.0960	1	SW846 1311/8151A	06-Jun-13	07-Jun-13	TG	1313229	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*60*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*60*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
	Oil & Grease	68.4	J,OG	mg/kg dry	93.5	46.7	1	EPA 1664A	05-Jun-13	06-Jun-13	JK	1313057	
	Oil & Grease (ASTM)	< 39.9	U	mg/l	80.0	39.9	1	EPA 1664	05-Jun-13	06-Jun-13	JK	1313058	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	SW846 1311	03-Jun-13	05-Jun-13	DJB	1312846	X
	Final pH of leachate	5.01		N/A			1	"	"	"	"	"	
TCLP Extraction for Metals													
Prepared by method SW846 1311													
	TCLP Extraction	Completed		N/A			1	"	"	"	"	"	X
	Final pH of leachate	5.01		N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 0.0024	U	mg/l	0.0100	0.0024	1	SW846 1311/6010C	05-Jun-13	06-Jun-13	EDT	1312943	X
7440-38-2	Arsenic	0.0095	R01, J U GS 6-12-13	mg/l	0.0100	0.0027	1	"	"	"	"	"	X
7440-39-3	Barium	0.431		mg/l	0.0100	0.0012	1	"	"	"	"	"	X
7440-43-9	Cadmium	0.0110		mg/l	0.0050	0.0004	1	"	"	07-Jun-13	"	1313340	X
7440-47-3	Chromium	0.0122	U GS 6-12-13	mg/l	0.0100	0.0016	1	"	"	06-Jun-13	"	1312943	X
7440-50-8	Copper	0.0232		mg/l	0.0100	0.0033	1	"	"	07-Jun-13	"	1313340	X
7439-97-6	Mercury	< 0.00008	U	mg/l	0.00020	0.00008	1	SW846 1311/7470A	"	06-Jun-13	JLM	1312844	X
7440-02-0	Nickel	0.0214		mg/l	0.0100	0.0034	1	SW846 1311/6010C	"	06-Jun-13	EDT	1312943	X
7439-92-1	Lead	0.0495		mg/l	0.0150	0.0042	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0166	U	mg/l	0.0400	0.0166	1	"	"	"	"	"	X
7440-66-6	Zinc	0.541		mg/l	0.280	0.0034	1	"	"	"	"	"	X
General Chemistry Parameters													
	ASTM Leaching	Completed		N/A			1	ASTM D3987-06	03-Jun-13	05-Jun-13	DJB	1312853	
	% Solids	85.5		%			1	SM2540 G Mod.	04-Jun-13	04-Jun-13	DT	1312971	
	Ammonia as N (ASTM)	< 0.165	U	mg/l	0.200	0.165	1	SM4500-NH3-B,C	07-Jun-13	07-Jun-13	ELE	1313399	
	Chemical Oxygen Demand (ASTM)	4.85	J	mg/l	5.00	1.62	1	HACH8000	05-Jun-13	05-Jun-13	CAA	1313153	
	Total Solids	343		mg/l	5.00	4.33	1	SM2540 B	04-Jun-13	05-Jun-13	BD	1312979	
	Total Volatile Solids	4.01		%			1	SM2540 G	"	06-Jun-13	BD	1312978	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	03-Jun-13	03-Jun-13	JRF	1312827	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	03-Jun-13 10:10	03-Jun-13 10:50	JRF	1312822	X
	pH	5.98	pH J GS 6-12-13	pH Units			1	SW846 9045D	31-May-13 15:54	31-May-13 16:18	BD	1312726	
Reactivity Cyanide/Sulfide													
Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	07-Jun-13	07-Jun-13	DJB	1313421	X
	Reactive Cyanide	< 24.9	U	mg/kg dry	24.9	24.9	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-135TRE-03-058 SB70612-03	M0856	Soil	29-May-13 11:00	31-May-13

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Toxicity Characteristics													
Reactivity Cyanide/Sulfide													
Prepared by method General Preparation													
	Reactive Sulfide	< 49.9	U	mg/kg dry	49.9	49.9	1	SW846 Ch. 7.3	07-Jun-13	07-Jun-13	DJB	1313421	X

Data Qualifier Summary

Lab Reporting Batch ID: M0856 | Laboratory: MITKEM

EDD Filename: M0856_SW6010_W_SEDD2A_EDD | eQAPP Name: Cornell_OU1_Spectrum (071012)

Method Category: METALS

Method: 6010B-TCLP **Matrix:** SO

Sample ID: CDE-OU1-WC-135TRE-01-056 *Collected:* 5/29/2013 10:40:00 *Analysis Type:* 1RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.0078	J	0.0027	MDL	0.0027	PQL	mg/L	U	Mb
CHROMIUM	0.0075	J	0.0016	MDL	0.0016	PQL	mg/L	U	Mb

Sample ID: CDE-OU1-WC-135TRE-02-057 *Collected:* 5/29/2013 1:20:00 *Analysis Type:* 1RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.0089	J	0.0027	MDL	0.0027	PQL	mg/L	U	Mb
CHROMIUM	0.0202		0.0016	MDL	0.0016	PQL	mg/L	U	Mb
ZINC	0.181	J	0.0034	MDL	0.0034	PQL	mg/L	U	Mb

Sample ID: CDE-OU1-WC-135TRE-03-058 *Collected:* 5/29/2013 11:00:00 *Analysis Type:* 1RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	0.0095	J	0.0027	MDL	0.0027	PQL	mg/L	U	Mb
CHROMIUM	0.0122		0.0016	MDL	0.0016	PQL	mg/L	U	Mb

* denotes a non-reportable result

Project Name and Number: Cornell G278 - Cornell Waste Characterization

Data Qualifier Summary

Lab Reporting Batch ID: M0856 Laboratory: MITKEM

EDD Filename: M0856_SM4500_H_SEDD2A_EDD eQAPP Name: Cornell_OU1_Spectrum (071012)

Method Category: EM

Method: SM 4500-H+ B **Matrix:** AQ

Sample ID: CDE-OU1-WC-135TRE-01-056 *Collected:* 5/29/2013 10:40:00 *Analysis Type:* 1RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
pH	5.74		0	MDL	0	PQL	pH	J	StoA

Sample ID: CDE-OU1-WC-135TRE-02-057 *Collected:* 5/29/2013 1:20:00 *Analysis Type:* 1RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
pH	5.59		0	MDL	0	PQL	pH	J	StoA

Sample ID: CDE-OU1-WC-135TRE-03-058 *Collected:* 5/29/2013 11:00:01 *Analysis Type:* 1RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
pH	5.98		0	MDL	0	PQL	pH	J	StoA

* denotes a non-reportable result

Project Name and Number: Cornell G278 - Cornell Waste Characterization

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 5/30/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

5/30/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 5/30/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: HOT, HUMID. AM TEMP: 80°F. AFTERNOON TEMP 92°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT WASTE CHARACTERIZATION SOIL SAMPLES AT CHURCH PROPERTY - 135 TREMONT AVE. PROP. ID #226.

Description of Chemical Data Acquisition Work Performed: SEE ATTACHED PA FORM U ANALYTICAL REQUIREMENTS LIST.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT VIA FEDEX TO MITKEM LABS (SPECTRUM) AGAWAM, MA.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 5/30/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 5/30/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	✓			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

5/30/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 5/30/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		5/30/13
CQC Systems Manager			5-30-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5-DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
9087695301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: 62789024 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-WC-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: * SEE ATTACHMENT * FOR FULL LIST OF FA FORM U ANALYTICAL REQUIREMENTS						
	135TRE-01-056	5/29/13	1040	C	SO	1	3				X	X	X	X	X	X
	135TRE-02-057	5/29/13	1320	C	SO	1	3				X	X	X	X	X	X
	135TRE-03-058	5/30/13	1100	C	SO	1	3				X	X	X	X	X	X
	TEMP. BLANK	5/30/13				1										

☒ E-mail to KLICKFIELD@SEVENSON.COM
AND
EDD Format ETSCHUDI@SEVENSON.COM

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FED EX	5/30/13	1700

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

TABLE A - GROWS, TRRF, Pottstown

Parameter Name	Type	Category	Limits	Units	85% of Limit
Ignitibility	As Received		> 140	F	
Oil and Grease	As Received			mg/l	
Paint Filter Test	As Received		no free liquids		
PCB's	As Received		50	mg/kg	
pH	As Received		2 - 12.5	S.U.	
Reactive Cyanide	As Received		100	mg/l	
Reactive Sulfide	As Received		500	mg/l	
Total Solids	As Received				
Total Volatile Solids	As Received				
Ammonia-Nitrogen	ASTM		111111	mg/l	
Chemical Oxygen Demand	ASTM				
Oil and Grease	ASTM		88550	mg/l	
Total Solids	ASTM				
pH	TCLP				
Arsenic	TCLP	metals	5	mg/l	4.25
Barium	TCLP	metals	100	mg/l	85
Cadmium	TCLP	metals	1	mg/l	0.85
Chromium	TCLP	metals	5	mg/l	4.25
Copper	TCLP	metals	167	mg/l	142
Lead	TCLP	metals	5	mg/l	4.25
Mercury	TCLP	metals	0.2	mg/l	0.17
Nickel	TCLP	metals	242	mg/l	206
Selenium	TCLP	metals	1	mg/l	0.85
Silver	TCLP	metals	5	mg/l	4.25
Zinc	TCLP	metals	1875	mg/l	1594
2, 4-D	TCLP	herb	10	mg/l	8.5
2, 4, 5 -TP	TCLP	herb	1	mg/l	0.85
Chlordane	TCLP	pest	0.03	mg/l	0.0255
Endrin	TCLP	pest	0.02	mg/l	0.017
Heptachlor	TCLP	pest	0.008	mg/l	0.0068
Heptachlor Epoxide	TCLP	pest	0.008	mg/l	0.0068
Lindane	TCLP	pest	0.4	mg/l	0.34
Methoxychlor	TCLP	pest	10	mg/l	8.5
Toxaphene	TCLP	pest	0.5	mg/l	0.425
2, 4, 5-trichlorophenol	TCLP	acids	400	mg/l	340
2, 4, 6-trichlorophenol	TCLP	acids	2	mg/l	1.7
m-cresol	TCLP	acids	200	mg/l	170
o-cresol	TCLP	acids	200	mg/l	170
p-cresol	TCLP	acids	200	mg/l	170
Pentachlorophenol	TCLP	acids	100	mg/l	85
2, 4-dinitrotoluene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobenzene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobutadiene	TCLP	base/neutral	0.5	mg/l	0.425
Hexachloroethane	TCLP	base/neutral	3	mg/l	2.55
Nitrobenzene	TCLP	base/neutral	2	mg/l	1.7
Pyridine	TCLP	base/neutral	5	mg/l	4.25
1,1-dichloroethylene	TCLP	volatiles	0.7	mg/l	0.595
1,2-dichloroethane	TCLP	volatiles	0.5	mg/l	0.425
1,4-dichlorobenzene	TCLP	volatiles	7.5	mg/l	6.375
Benzene	TCLP	volatiles	0.5	mg/l	0.425
Carbon Tetrachloride	TCLP	volatiles	0.5	mg/l	0.425
Chlorobenzene	TCLP	volatiles	100	mg/l	85
Chloroform	TCLP	volatiles	8	mg/l	6.8
Methyl ethyl ketone	TCLP	volatiles	200	mg/l	170
Tetrachloroethylene	TCLP	volatiles	0.7	mg/l	0.595
Trichloroethylene	TCLP	volatiles	0.5	mg/l	0.425
Vinyl chloride	TCLP	volatiles	0.2	mg/l	0.17

From: (908) 769-5301 Origin ID: LDJA
Eric Tschudi
Sevenson Environmental Services, In
333 Hamilton Blvd

South Plainfield, NJ 07080

J13111302120336

Ship Date: 30MAY13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (413) 789-9012 BILL SENDER
Sample Receiving
Spectrum Analytical
11 Almgren Drive

AGAWAM, MA 01001

Ref # Sevenson P.O G2789024
Invoice #
PO # G2789024
Dept #

FRI - 31 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 7998 8236 5296
0201

EB EHTA

01001
MA-US
BDL

5180/D777/03A0

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	Ship from:
Sample Receiving	Eric Tschudi
Spectrum Analytical	Sevenson Environmental Services, In
11 Almgren Drive	333 Hamilton Blvd
AGAWAM, MA	South Plainfield, NJ
01001	07080
US	US
4137899018	9087695301

Shipment Information:
Tracking no.: 799882365296
Ship date: 05/30/2013
Estimated shipping charges: 21.21

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson P.O G2789024
P.O. no.: G2789024
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

WASTE CHARACTERIZATION
SOIL SAMPLING.

5/29/13 (57)

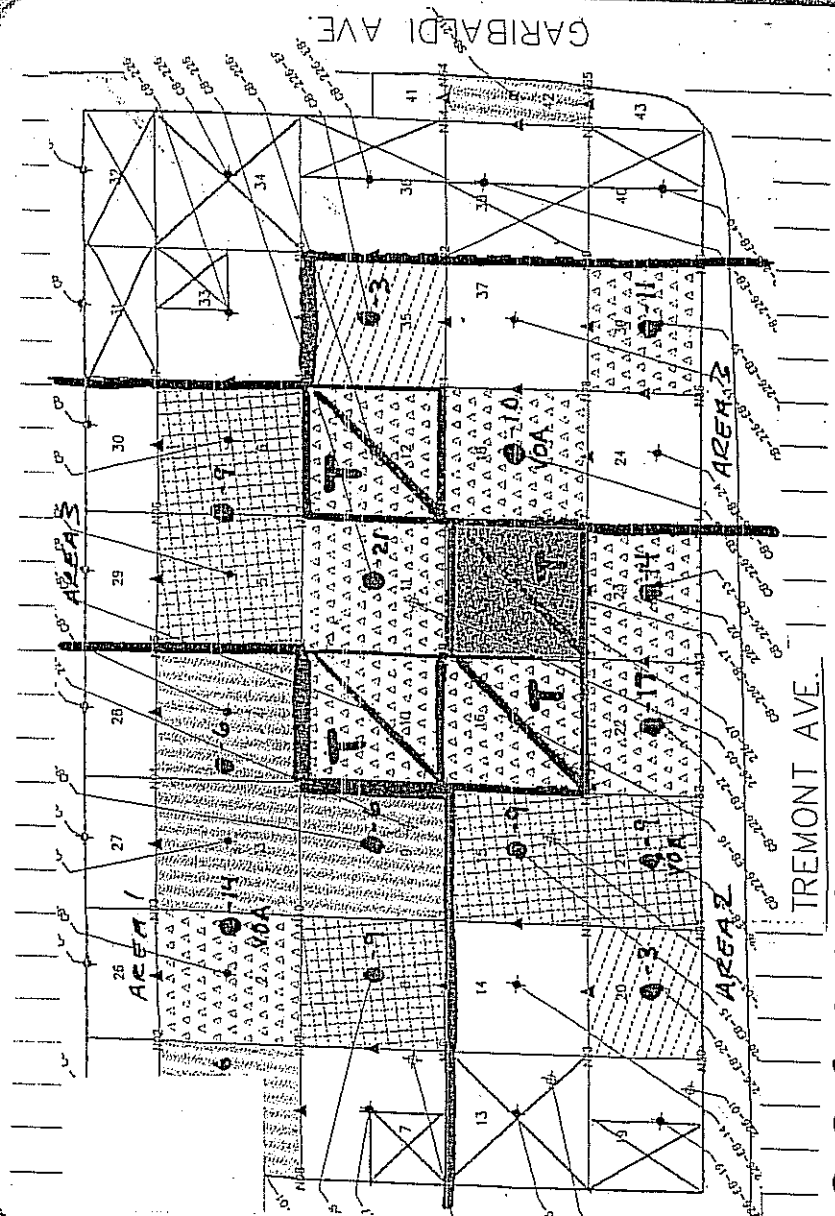
E. TSCHUDI ARRIVES TO 135 TREMONT AVENUE, CATHOLIC CHURCH PROPERTY PROP. ID# 226. WEATHER OVERCAST ~~HAZY~~ HUMID, 76°F. WIND - CALM.

0930 BEGIN SET UP OF GRID MEASUREMENT FOR SAMPLING. USING EXISTING SURVEY POINTS FROM 'LAYOUT INC.' PINK FLAGGING HAS BEEN REMOVED AT MANY GRID NODES DUE TO THE GRASS BEING MOWED.

1000 PARISH PRIEST FROM THE CATHOLIC CHURCH COMES OVER TO INTRODUCE HIMSELF ALONG W/ A CHURCH VOLUNTEER WORKER. HE IS CONCERNED THAT WE MAY BE IN THE WAY DURING THE CHURCH FESTIVAL "FEAST OF ST. ANTHONY". I ASSURED HIM WE WOULDN'T START EXCAVATION UNTIL AFTER IT WAS OVER. (JUNE 4-8.).

DIVIDE EXCAVATION MAP INTO 3 AREAS. SEE MAP ON P. 58. EACH AREA WILL HAVE 5 COMPOSITE LOCATIONS, 1 OF WHICH WILL BE THE LOCATION FOR THE VOA PORTION OF THE SAMPLE. EACH SAMPLE WILL INCLUDE 1-4oz VOA AND 3-8oz SOIL JARS. THE SAMPLES WILL BE ANALYZED FOR FULL PA FORM V ANALYTICAL REQUIREMENTS.

Eric Tschudi 5/29/13



WASTE CHARACTERIZATION
135 TREMONT AVENUE
5/29/13 (PROPERTY ID # 226)

59

THE MAP ON P.58 IS FIGURE 4A OF THE CDESS OU1 RD EXCAVATION PLAN FOR PROPERTY ID # 226. THE EXCAVATION AREA IS DIVIDED INTO 3 SAMPLING AREAS, 1, 2 + 3. EACH AREA HAS 5 COMPOSITE SAMPLE LOCATIONS, WHICH ARE IDENTIFIED BY A BLACK DOT: ●. THE DEPTH, IN INCHES, IS WRITTEN NEXT TO THE DOT IDENTIFYING THE SAMPLE DEPTH. A "VOA" WRITTEN NEXT TO A SAMPLE LOCATION SIGNIFIES THE LOCATION OF THE VOA COLLECTION. FOR EXAMPLE, THE VOA SAMPLE IN AREA 1 WAS COLLECTED AT 14" BELOW THE SURFACE.

1040 COLLECT CDE-OU1-WC-135TRE-01-056.

USING A HAND AUGER, I COLLECT SOIL MATERIAL FROM 5 LOCATIONS WITHIN AREA 1, SEE MAP, P.58. THE MATERIAL IS COMPOSITED IN A FOIL PAN AND THOROUGHLY HOMOGENIZED. THE VOA SAMPLE COLLECTED DIRECTLY FROM THE AUGER BUCKET. THIS PROCESS WILL BE UTILIZED FOR THE REMAINING AREAS (2 AND 3). USED POLY SHEETING ON THE GROUND SURFACE TO PROTECT THE GRASS. WAS ABLE TO MINIMIZE THE DISTURBANCE FROM HAND AUGERING. FOLLOWING SAME PROCEDURE FOR AREA 2 USING HAND AUGER TO COLLECT SOIL FROM EACH COMPOSITE LOCATION.

(60)

WASTE CHARACTERIZATION
135 TREMONT AVENUE 5/29/13 ~~5/28/13~~
(PROPERTY 226)

WEATHER UPDATE: HOT, HUMID. 87°.
CONTINUE COLLECTION OF SOIL FROM COMPOSITE
LOCATIONS WITHIN AREA 2. COLLECT THE
VOA SAMPLE FROM THE LAST COMPOSITE AREA.
1320 COLLECT CDE-OU1-WC-135TRE-02-057.
PACK UP EQUIPMENT AND GEAR.
WILL STORE THESE SAMPLES ON ICE
OVERNIGHT AND RESUME SAMPLING TOM-
ORROW. SAMPLES WILL BE LOCKED UP
IN A SECURE TRAILER OVERNIGHT. INFORM-
ATION OF SHIPPING AND LAB INFO IS AS FOLLOWS:
LAB: SPECTRUM ANALYTICAL
11 ALMGREN DRIVE
AGAWAM, MA 01001
413 789 9018.
CONTACT: AGNES HUNTLEY - 401 732 3400
agnes_ng@~~mitchem~~ mitkem.com
SAMPLES WILL BE SHIPPED OVERNIGHT VIA
FEDEX. SAMPLES WILL BE LOGGED INTO
SAMPLE LOG, COC WILL BE COMPLETED, SAMPLES
ARE TO BE WRAPPED IN BUBBLE WRAP AND PUT IN
ZIP LOCK BAGS AND PACKED IN A COOLER WITH
ICE WITH CUSTODY SEALS.
5/29/13

WASTE CHARACTERIZATION
135 TREMONT AVE.
5/30/13 (PROP. ID # 226)

(61)

0815 ARRIVE AT CHURCH PROPERTY,
135 TREMONT AVE, TO RESUME
WC SOIL SAMPLING. SET UP WITHIN
AREA 3 FOR COMPOSITE SAMPLE.
WEATHER FORECAST FOR TODAY - HOT,
HUMID - HIGH OF 94°F. RIGHT NOW: 80° F.
BEGIN HAND AUGERING WITHIN AREA 3.
5 COMPOSIT LOCATIONS WILL MAKE UP SAMPLE
ONE OF WHICH HAS BEEN SELECTED FOR VOA
COLLECTION. FIRST COMPOSITE LOCATION,
SEE MAP ON P. 58. START WITH 21' DEPTH
LOCATION. THEN MOVE TO 9" DEPTH, THEN
3", 11" AND FINALLY 10' WHICH IS WHERE
I COLLECTED THE VOA SAMPLE.
1100 COLLECT CDEOU1-WC-135TRE-03-058.
SAMPLE COLLECTED INTO 3-8oz SOIL
JARS AND 1-4oz VOA JAR. SAMPLES
ON ICE. PACK UP FROM THIS AREA. THIS
COMPLETES THE WC SAMPLING FOR THE
CHURCH PROPERTY. SAMPLES WILL BE
SHIPPED TODAY. SEE P. 60 FOR LAB
INFO. FEDEX AIRBILL # ~~77~~ 7998-
8236-5296.
5/30/13

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/09/2013

TRANSMITTAL NO.: 01450A-303

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
29	Waste Deter-417 Hancock St Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) CDE-OU1-WC-417HAN-C-051; CDE-OU1-WC-419HAN-D2-050; CDE-OU1-WC-413HAN-AB-052; CDE-OU1-WC-329HAN-B-053; CDE-OU1-WC-211NMK-D-054**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **03/12/13**

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
15-Mar-13 08:36

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
333 Hamilton Blvd.
South Plainfield, NJ 07080

Attn: Eric Tschudi

Work Order: M0223
Project : Cornell Dubilier Waste Characterization
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~M0223-01~~	~~CDE-OU1-WC-417HAN-D2-050~~	~~Soil~~	~~20-Feb-13 14:00~~	~~21-Feb-13 10:15~~
M0223-02	CDE-OU1-WC-417HAN-C-051	Soil	21-Feb-13 11:10	22-Feb-13 10:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-417HAN-C-051 SB65010-02	M0223	Soil	21-Feb-13 11:10	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	25-Feb-13	26-Feb-13	CMB	1304329	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 5.0	D	µg/l	5.0	3.3	5	SW846 1311/8260C	27-Feb-13	27-Feb-13	eq	1304511	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	8.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.0	D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.0	D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.0	D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.0	D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.0	D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 5.0	D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 5.0	D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.0	D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*97*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	26-Feb-13	27-Feb-13	CMB	1304456	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	26-Feb-13	27-Feb-13	"	1304457	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535													
106-46-7	1,4-Dichlorobenzene	< 5.00		µg/l	5.00	0.350	1	SW846 1311/8270D	28-Feb-13	28-Feb-13	MSL	1304618	X
121-14-2	2,4-Dinitrotoluene	< 5.00		µg/l	5.00	0.730	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 5.00		µg/l	5.00	0.540	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 5.00		µg/l	5.00	0.430	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 5.00		µg/l	5.00	0.720	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 5.00		µg/l	5.00	0.770	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.0		µg/l	10.0	0.680	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 5.00		µg/l	5.00	0.440	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 5.00		µg/l	5.00	0.600	1	"	"	"	"	"	X
110-86-1	Pyridine	< 5.00		µg/l	5.00	0.850	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 5.00		µg/l	5.00	0.400	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 5.00		µg/l	5.00	0.760	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*64*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*73*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*66*			*30-130 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	*71*			*30-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-417HAN-C-051 SB65010-02	M0223	Soil	21-Feb-13 11:10	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	26-Feb-13	27-Feb-13	CMB	1304459	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535													
58-89-9	gamma-BHC (Lindane)	< 0.032		µg/l	0.032	0.023	1	SW846 1311/8081B	28-Feb-13	28-Feb-13	TG	1304616	X
76-44-8	Heptachlor	< 0.032		µg/l	0.032	0.025	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.032		µg/l	0.032	0.024	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.021		µg/l	0.021	0.019	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p') [2C]	< 0.032		µg/l	0.032	0.018	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.042		µg/l	0.042	0.025	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.042		µg/l	0.042	0.022	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 0.042		µg/l	0.042	0.017	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.042		µg/l	0.042	0.020	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.042		µg/l	0.042	0.019	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.042		µg/l	0.042	0.019	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.526		µg/l	0.526	0.234	1	"	"	"	"	"	X
57-74-9	Chlordane [2C]	< 0.368		µg/l	0.368	0.069	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*82*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*76*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*78*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*70*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 23.9		µg/kg dry	23.9	12.0	1	SW846 8082A	26-Feb-13	27-Feb-13	IMR	1304411	X
11104-28-2	Aroclor-1221	< 23.9		µg/kg dry	23.9	21.6	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 23.9		µg/kg dry	23.9	15.4	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 23.9		µg/kg dry	23.9	14.1	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 23.9		µg/kg dry	23.9	11.7	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 23.9		µg/kg dry	23.9	19.9	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 23.9		µg/kg dry	23.9	14.8	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 23.9		µg/kg dry	23.9	22.3	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 23.9		µg/kg dry	23.9	7.51	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*60*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*60*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*85*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*85*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535									Methylation date: 28-Feb-13				
93-72-1	2,4,5-TP (Silvex)	< 0.100		µg/l	0.100	0.0570	1	SW846 1311/8151A	28-Feb-13	01-Mar-13	TG	1304619	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-417HAN-C-051 SB65010-02	M0223	Soil	21-Feb-13 11:10	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Herbicides													
Prepared by method SW846 3535									Methylation date: 28-Feb-13				
94-75-7	2,4-D	< 0.100		µg/l	0.100	0.0840	1	SW846 1311/8151A	26-Feb-13	01-Mar-13	TG	1304619	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*40*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*40*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
	Oil & Grease	135	OG	mg/kg dry	99.6	49.7	1	EPA 1664A	26-Feb-13	01-Mar-13	JK	1304600	
	Oil & Grease (ASTM)	< 80.0		mg/l	80.0	39.9	1	EPA 1664	26-Feb-13	01-Mar-13	JK	1304601	
Fingerprinting by GC													
Prepared by method SW846 3550C													
8006-61-9	Gasoline	< 32.3		mg/kg dry	32.3	19.0	1	SW846 8100Mod.	26-Feb-13	26-Feb-13	SEP	1304367	
68476-30-2	Fuel Oil #2	< 32.3		mg/kg dry	32.3	18.8	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 32.3		mg/kg dry	32.3	3.2	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 32.3		mg/kg dry	32.3	19.3	1	"	"	"	"	"	
M09600000	Motor Oil	< 32.3		mg/kg dry	32.3	17.7	1	"	"	"	"	"	
8032-32-4	Ligroin	< 32.3		mg/kg dry	32.3	8.1	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 32.3		mg/kg dry	32.3	8.1	1	"	"	"	"	"	
	Hydraulic Oil	< 32.3		mg/kg dry	32.3	3.2	1	"	"	"	"	"	
	Dielectric Fluid	< 32.3		mg/kg dry	32.3	8.1	1	"	"	"	"	"	
	Unidentified	179		mg/kg dry	32.3	8.1	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/kg dry	32.3	3.2	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	179		mg/kg dry	32.3	3.2	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*71*			*40-140 %*			"	"	"	"	"	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	26-Feb-13	27-Feb-13	CMB	1304461	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Extraction for Metals													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	"	"	"	"	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0036	1	SW846 1311/6010C	27-Feb-13	27-Feb-13	EDT	1304490	X
7440-38-2	Arsenic	0.0118		mg/l	0.0080	0.0062	1	"	"	"	"	"	X
7440-39-3	Barium	< 1.20	R01	mg/l	1.20	0.0006	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0003	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0100		mg/l	0.0100	0.0066	1	"	"	"	"	"	X
7440-50-8	Copper	0.556		mg/l	0.0100	0.0050	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	SW846 1311/7470A	"	28-Feb-13	JLM	1304491	X
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0013	1	SW846 1311/6010C	"	27-Feb-13	EDT	1304490	X
7439-92-1	Lead	0.0372		mg/l	0.0150	0.0039	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0300		mg/l	0.0300	0.0076	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-417HAN-C-051 SB65010-02	M0223	Soil	21-Feb-13 11:10	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
7440-66-6	Zinc	0.788		mg/l	0.0100	0.0053	1	SW846 1311/6010C	27-Feb-13	27-Feb-13	EDT	1304490	X
General Chemistry Parameters													
	ASTM Leaching	Completed	ExL	N/A			1	ASTM D3987-06	26-Feb-13	27-Feb-13	CMB	1304460	
	% Solids	80.3		%			1	SM2540 G Mod.	25-Feb-13	25-Feb-13	DT	1304300	
	Ammonia as N (ASTM)	< 0.200		mg/l	0.200	0.165	1	SM4500-NH3-B,C	28-Feb-13	28-Feb-13	ARG	1304737	
	Chemical Oxygen Demand (ASTM)	< 5.00		mg/l	5.00	1.62	1	HACH8000	01-Mar-13	01-Mar-13	CAA	1304795	
	Moisture	19.7		%			1	SM2540 G Mod. calculation	25-Feb-13	25-Feb-13	DT	1304322	
	Total Solids	139		mg/l	5.00	4.33	1	SM2540 B	27-Feb-13	28-Feb-13	BD	1304599	
	Total Volatile Solids	8.59		%			1	SM2540 G	27-Feb-13	01-Mar-13	BD	1304527	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	26-Feb-13	26-Feb-13	VK	1304410	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	26-Feb-13 08:30	26-Feb-13 11:19	VK	1304409	X
	pH	6.99	pH	pH Units			1	SW846 9045D	25-Feb-13 11:00	25-Feb-13 13:34	BD	1304304	
Reactivity Cyanide/Sulfide Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	26-Feb-13	27-Feb-13	DJB	1304449	X
	Reactive Cyanide	< 24.8		mg/kg dry	24.8	24.8	1	"	"	"	"	"	X
	Reactive Sulfide	< 49.5		mg/kg dry	49.5	49.5	1	"	"	"	"	"	X

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/21/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: _____

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY, 25°F WINDY

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: ~~COLLECT WASTE~~ NONE

Planned Daily Activities: COLLECT WASTE CHARACTERIZATION SOIL SAMPLES AT RESIDENTIAL PROPERTIES AS PART OF OU1 RESIDENTIAL WORK.

Description of Chemical Data Acquisition Work Performed: TCLP VOC, SVOC METALS, PEST/HERB, TOTAL PCBs, REACTIVE CYANIDE, REACTIVE SULFIDE, pH, IGNITABILITY.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT VIA FEDEX TO MITCHELL LABS, N. KINGSTOWN, R.I.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

2/21/13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/21/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSEHUDI

Date

2/21/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/7-1/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/21/13
CQC Systems Manager	[illegible]	[illegible]	8/29/13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5 DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No. 92789024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= ICE 10= 11=

List preservative code below: 9

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	* SEE ATTACHMENT FOR FULL LIST OF ANALYTICAL REQUIREMENTS *								TEMP ONLY
	CDE-OU1-WC 417HAN-C-~~050~~ 051	2/21/13	1110	C	SO	1	3			X	X	X	X	X	X	X	X	
	TEMP BLANK					1												X

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FED EX	2/21/13	1700

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13101212190326

Ship Date: 21FEB13
ActWgt 10.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 22 FEB A2
PRIORITY OVERNIGHT

TRK# 7948 0532 5970
0201

ZA NCOA

02852
RI-US
PVD

516G1/DF24/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794805325970
Ship date: 02/21/2013
Estimated shipping charges: 23.86

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 10 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

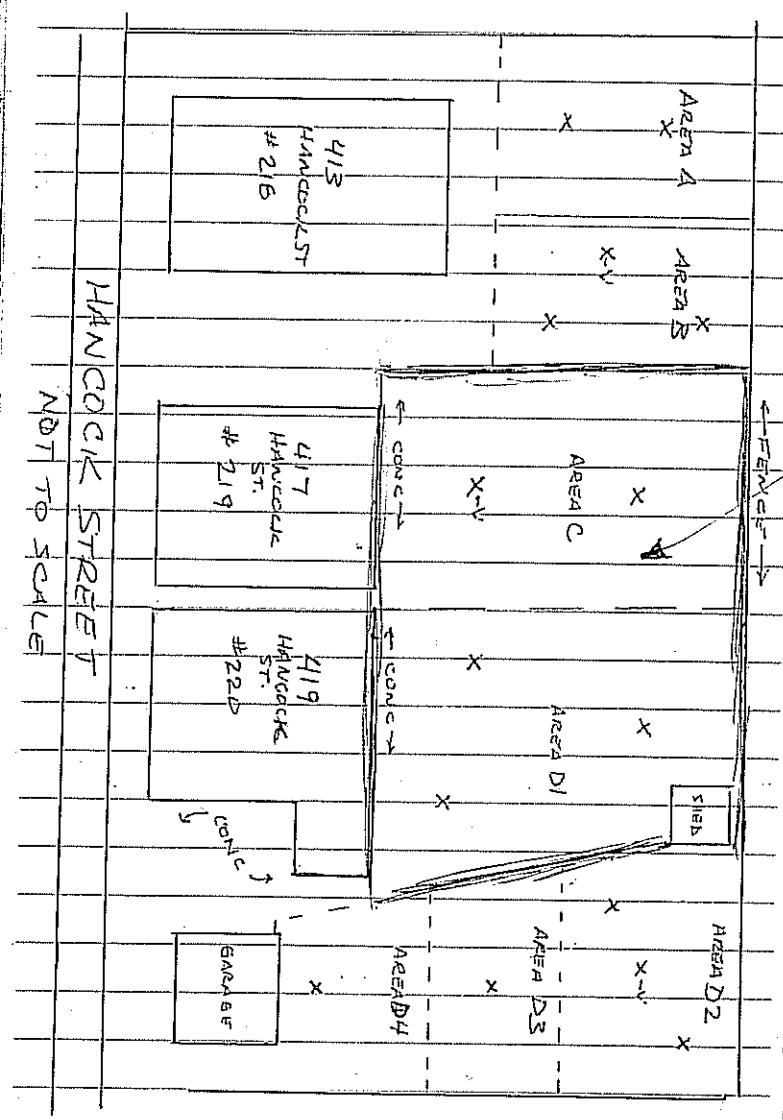
Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SOIL SAMPLE LOCATION MAP
419-413 HANCOCK ST.

(44) 2/20/13



LOCATION OF COMPOSITE SOIL SAMPLE: CDE-OU1-NC-417HAN-C-051

[signature] 2/20/13

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/09/2013

TRANSMITTAL NO.: 01450A-304

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
30	Waste Deter-419 Hancock St Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: Sample ID(s) CDE-OU1-WC-417HAN-C-051; CDE-OU1-WC-419HAN-D2-050; CDE-OU1-WC-413HAN-AB-052; CDE-OU1-WC-329HAN-B-053; CDE-OU1-WC-211NMK-D-054

Prepared By: Ken Paisley

CC: Kim Lickfield

Date: 03/12/13

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
15-Mar-13 08:36

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
333 Hamilton Blvd.
South Plainfield, NJ 07080

Attn: Eric Tschudi

Work Order: M0223
Project : Cornell Dubilier Waste Characterization
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0223-01	CDE-OU1-WC-419HAN-D2-050	Soil	20-Feb-13 14:00	21-Feb-13 10:15
~~M0223-02~~	~~CDE-OU1-WC-417HAN-C-051~~	~~Soil~~	~~21-Feb-13 14:10~~	~~23-Feb-13 10:55~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-419HAN-D2-050 SB65010-01	M0223	Soil	20-Feb-13 14:00	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	25-Feb-13	26-Feb-13	CMB	1304329	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 5.0	D	µg/l	5.0	3.3	5	SW846 1311/8260C	27-Feb-13	27-Feb-13	eq	1304511	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	8.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.0	D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.0	D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.0	D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.0	D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.0	D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 5.0	D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 5.0	D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.0	D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*102*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*98*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	26-Feb-13	27-Feb-13	CMB	1304456	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	26-Feb-13	27-Feb-13	"	1304457	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535													
106-46-7	1,4-Dichlorobenzene	< 5.00		µg/l	5.00	0.350	1	SW846 1311/8270D	28-Feb-13	28-Feb-13	MSL	1304618	X
121-14-2	2,4-Dinitrotoluene	< 5.00		µg/l	5.00	0.730	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 5.00		µg/l	5.00	0.540	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 5.00		µg/l	5.00	0.430	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 5.00		µg/l	5.00	0.720	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 5.00		µg/l	5.00	0.770	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.0		µg/l	10.0	0.680	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 5.00		µg/l	5.00	0.440	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 5.00		µg/l	5.00	0.600	1	"	"	"	"	"	X
110-86-1	Pyridine	< 5.00		µg/l	5.00	0.850	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 5.00		µg/l	5.00	0.400	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 5.00		µg/l	5.00	0.760	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*77*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*87*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*78*			*30-130 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	*90*			*30-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-419HAN-D2-050 SB65010-01	M0223	Soil	20-Feb-13 14:00	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	26-Feb-13	27-Feb-13	CMB	1304459	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535													
58-89-9	gamma-BHC (Lindane)	< 0.035		µg/l	0.035	0.026	1	SW846 1311/8081B	28-Feb-13	28-Feb-13	TG	1304616	X
76-44-8	Heptachlor	< 0.035		µg/l	0.035	0.028	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.035		µg/l	0.035	0.027	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.024		µg/l	0.024	0.022	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	0.045		µg/l	0.035	0.025	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.047		µg/l	0.047	0.028	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.047		µg/l	0.047	0.024	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	0.053		µg/l	0.047	0.020	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.047		µg/l	0.047	0.022	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.047		µg/l	0.047	0.021	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.047		µg/l	0.047	0.021	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.588		µg/l	0.588	0.261	1	"	"	"	"	"	X
57-74-9	Chlordane [2C]	< 0.412		µg/l	0.412	0.077	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*83*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*72*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*81*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*66*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 26.4		µg/kg dry	26.4	13.2	1	SW846 8082A	26-Feb-13	27-Feb-13	IMR	1304411	X
11104-28-2	Aroclor-1221	< 26.4		µg/kg dry	26.4	23.8	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 26.4		µg/kg dry	26.4	16.9	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 26.4		µg/kg dry	26.4	15.5	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 26.4		µg/kg dry	26.4	12.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	934		µg/kg dry	26.4	22.0	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260 [2C]	77.8		µg/kg dry	26.4	11.8	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 26.4		µg/kg dry	26.4	24.6	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 26.4		µg/kg dry	26.4	8.28	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*60*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*70*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*85*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*85*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535									Methylation date: 28-Feb-13				
93-72-1	2,4,5-TP (Silvex)	< 0.105		µg/l	0.105	0.0600	1	SW846 1311/8151A	28-Feb-13	01-Mar-13	TG	1304619	X

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-419HAN-D2-050 SB65010-01	M0223	Soil	20-Feb-13 14:00	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Herbicides													
Prepared by method SW846 3535										Methylation date: 28-Feb-13			
94-75-7	2,4-D	< 0.105		µg/l	0.105	0.0884	1	SW846 1311/8151A	28-Feb-13	01-Mar-13	TG	1304619	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*50*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*45*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
	Oil & Grease	214	OG	mg/kg dry	107	53.5	1	EPA 1664A	28-Feb-13	01-Mar-13	JK	1304600	
	Oil & Grease (ASTM)	< 80.0		mg/l	80.0	39.9	1	EPA 1664	28-Feb-13	01-Mar-13	JK	1304601	
Fingerprinting by GC													
Prepared by method SW846 3550C													
8006-61-9	Gasoline	< 34.2		mg/kg dry	34.2	20.0	1	SW846 8100Mod.	26-Feb-13	26-Feb-13	SEP	1304367	
68476-30-2	Fuel Oil #2	< 34.2		mg/kg dry	34.2	19.9	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 34.2		mg/kg dry	34.2	3.4	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 34.2		mg/kg dry	34.2	20.4	1	"	"	"	"	"	
M09000000	Motor Oil	< 34.2		mg/kg dry	34.2	18.7	1	"	"	"	"	"	
8032-32-4	Ligroin	< 34.2		mg/kg dry	34.2	8.5	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 34.2		mg/kg dry	34.2	8.5	1	"	"	"	"	"	
	Hydraulic Oil	< 34.2		mg/kg dry	34.2	3.4	1	"	"	"	"	"	
	Dielectric Fluid	< 34.2		mg/kg dry	34.2	8.5	1	"	"	"	"	"	
	Unidentified	125		mg/kg dry	34.2	8.5	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/kg dry	34.2	3.4	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	125		mg/kg dry	34.2	3.4	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*81*			*40-140 %*			"	"	"	"	"	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	26-Feb-13	27-Feb-13	CMB	1304461	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
TCLP Extraction for Metals													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	"	"	"	"	X
	Final pH of leachate	Completed	ExL	N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0036	1	SW846 1311/6010C	27-Feb-13	27-Feb-13	EDT	1304490	X
7440-38-2	Arsenic	0.0132		mg/l	0.0080	0.0062	1	"	"	"	"	"	X
7440-39-3	Barium	< 1.20	R01	mg/l	1.20	0.0006	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0003	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0100		mg/l	0.0100	0.0066	1	"	"	"	"	"	X
7440-50-8	Copper	0.0392		mg/l	0.0100	0.0050	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00008	1	SW846 1311/7470A	"	28-Feb-13	JLM	1304491	X
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0013	1	SW846 1311/6010C	"	27-Feb-13	EDT	1304490	X
7439-92-1	Lead	0.0422		mg/l	0.0150	0.0039	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0300		mg/l	0.0300	0.0076	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-419HAN-D2-050 SB65010-01	M0223	Soil	20-Feb-13 14:00	22-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
7440-66-6	Zinc	1.47		mg/l	0.0100	0.0053	1	SW846 1311/6010C	27-Feb-13	27-Feb-13	EDT	1304490	X
General Chemistry Parameters													
	ASTM Leaching	Completed	ExL	N/A			1	ASTM D3987-06	26-Feb-13	27-Feb-13	CMB	1304460	
	% Solids	74.6		%			1	SM2540 G Mod.	25-Feb-13	25-Feb-13	DT	1304300	
	Ammonia as N (ASTM)	< 0.200		mg/l	0.200	0.165	1	SM4500-NH3-B,C	28-Feb-13	28-Feb-13	ARG	1304737	
	Chemical Oxygen Demand (ASTM)	< 5.00		mg/l	5.00	1.62	1	HACH8000	01-Mar-13	01-Mar-13	CAA	1304795	
	Moisture	25.4		%			1	SM2540 G Mod. calculation	25-Feb-13	25-Feb-13	DT	1304322	
	Total Solids	198		mg/l	5.00	4.33	1	SM2540 B	27-Feb-13	28-Feb-13	BD	1304599	
	Total Volatile Solids	5.95		%			1	SM2540 G	27-Feb-13	01-Mar-13	BD	1304527	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	26-Feb-13	26-Feb-13	VK	1304410	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	26-Feb-13 08:30	26-Feb-13 11:19	VK	1304409	X
	pH	7.35	pH	pH Units			1	SW846 9045D	25-Feb-13 11:00	25-Feb-13 13:20	BD	1304304	
Reactivity Cyanide/Sulfide Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	26-Feb-13	27-Feb-13	DJB	1304449	X
	Reactive Cyanide	< 24.3		mg/kg dry	24.3	24.3	1	"	"	"	"	"	X
	Reactive Sulfide	< 48.6		mg/kg dry	48.6	48.6	1	"	"	"	"	"	X

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/20/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHODI

Date

2/21/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 2/21/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: OVERCAST, 30° F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PERSONAL PROTECTIVE EQUIPMENT.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT WASTE CHARACTERIZATION SOIL SAMPLES AT RESIDENTIAL PROPERTIES AS PART OF DUI RESIDENTIAL-PHASE WORK.

Description of Chemical Data Acquisition Work Performed: TCLP VOC, SVOC, METALS, PEST/HERB, TOTAL PCB, RE CYANIDE, RE SULFIDE, PH, IGNITABILITY.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT TO MITKEM LABS - KINGSTOWN, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 2/20/13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/20/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

2/20/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/20/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

_____

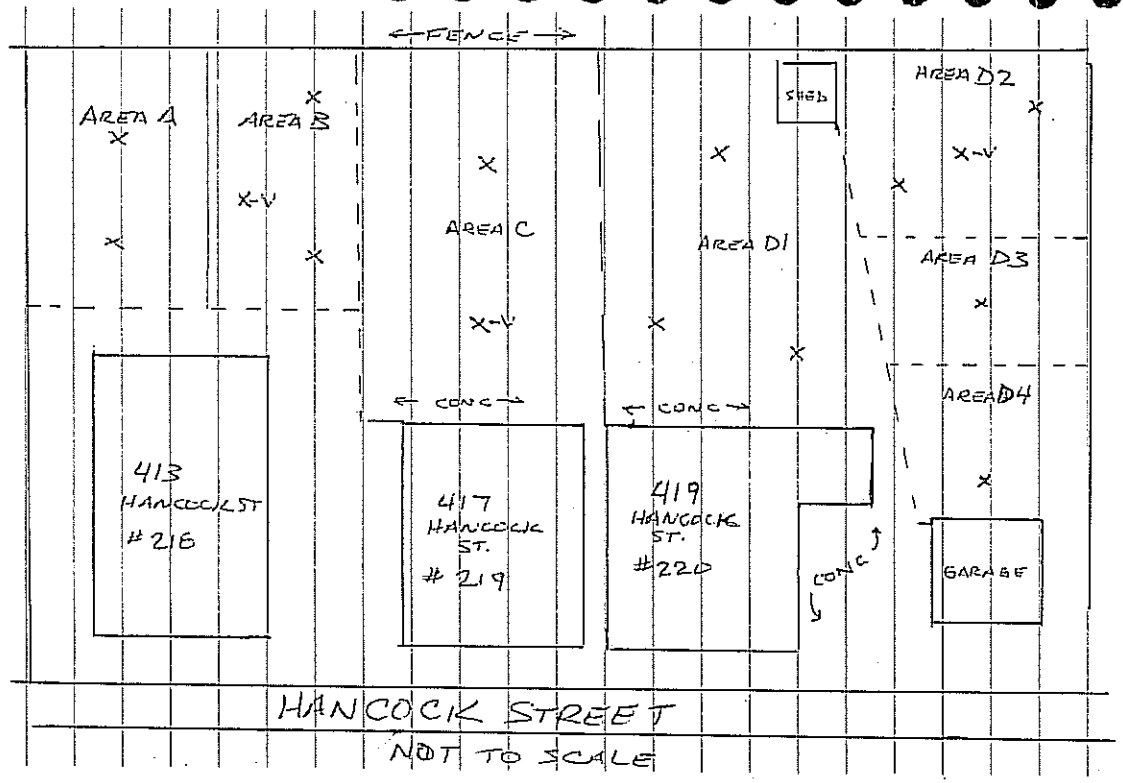
_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	ERIC TSCHUDI		2/20/13
CQC Systems Manager	William Zambrano		2-20-13

SOIL SAMPLE LOCATION MAP
419-413 HANCOCK ST.

(44) 2/20/13



NOT TO SCALE

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: 62789024 RQN:

Project No.: G278
Site Name: CORNELL DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= ICE 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below: 9

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards: *SEE ATTACHMENT*

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCLP VOC	TCLP SVOC	TCLP PEST/HERB	TOTAL PCBs	TCLP METALS	RE. CYANIDE	RE. SULFIDE	PH/IGNITABILITY	TEMPERATURE		
	CDE-DUI-WC-419HAN-DZ-050	2/20/13	1400	C	SO	1	2			X	X	X	X	X	X	X				
	TEMP BLANK	2/20/13	1500			1											X			

☐ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FED EX	2/20/13	1700

TABLE A - GROWS, TRRF, Pottstown

Parameter Name	Type	Category	Limits	Units	85% of Limit
Ignitibility	As Received		> 140	F	
Oil and Grease	As Received			mg/l	
Paint Filter Test	As Received		no free liquids		
PCB's	As Received		50	mg/kg	
pH	As Received		2 - 12.5	S.U.	
Reactive Cyanide	As Received		100	mg/l	
Reactive Sulfide	As Received		500	mg/l	
Total Solids	As Received				
Total Volatile Solids	As Received				
Ammonia-Nitrogen	ASTM		111111	mg/l	
Chemical Oxygen Demand	ASTM				
Oil and Grease	ASTM		88550	mg/l	
Total Solids	ASTM				
pH	TCLP				
Arsenic	TCLP	metals	5	mg/l	4.25
Barium	TCLP	metals	100	mg/l	85
Cadmium	TCLP	metals	1	mg/l	0.85
Chromium	TCLP	metals	5	mg/l	4.25
Copper	TCLP	metals	167	mg/l	142
Lead	TCLP	metals	5	mg/l	4.25
Mercury	TCLP	metals	0.2	mg/l	0.17
Nickel	TCLP	metals	242	mg/l	206
Selenium	TCLP	metals	1	mg/l	0.85
Silver	TCLP	metals	5	mg/l	4.25
Zinc	TCLP	metals	1875	mg/l	1594
2, 4-D	TCLP	herb	10	mg/l	8.5
2, 4, 5 -TP	TCLP	herb	1	mg/l	0.85
Chlordane	TCLP	pest	0.03	mg/l	0.0255
Endrin	TCLP	pest	0.02	mg/l	0.017
Heptachlor	TCLP	pest	0.008	mg/l	0.0068
Heptachlor Epoxide	TCLP	pest	0.008	mg/l	0.0068
Lindane	TCLP	pest	0.4	mg/l	0.34
Methoxychlor	TCLP	pest	10	mg/l	8.5
Toxaphene	TCLP	pest	0.5	mg/l	0.425
2, 4, 5-trichlorophenol	TCLP	acids	400	mg/l	340
2, 4, 6-trichlorophenol	TCLP	acids	2	mg/l	1.7
m-cresol	TCLP	acids	200	mg/l	170
o-cresol	TCLP	acids	200	mg/l	170
p-cresol	TCLP	acids	200	mg/l	170
Pentachlorophenol	TCLP	acids	100	mg/l	85
2, 4-dinitrotoluene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobenzene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobutadiene	TCLP	base/neutral	0.5	mg/l	0.425
Hexachloroethane	TCLP	base/neutral	3	mg/l	2.55
Nitrobenzene	TCLP	base/neutral	2	mg/l	1.7
Pyridine	TCLP	base/neutral	5	mg/l	4.25
1,1-dichloroethylene	TCLP	volatiles	0.7	mg/l	0.595
1,2-dichloroethane	TCLP	volatiles	0.5	mg/l	0.425
1,4-dichlorobenzene	TCLP	volatiles	7.5	mg/l	6.375
Benzene	TCLP	volatiles	0.5	mg/l	0.425
Carbon Tetrachloride	TCLP	volatiles	0.5	mg/l	0.425
Chlorobenzene	TCLP	volatiles	100	mg/l	85
Chloroform	TCLP	volatiles	8	mg/l	6.8
Methyl ethyl ketone	TCLP	volatiles	200	mg/l	170
Tetrachloroethylene	TCLP	volatiles	0.7	mg/l	0.595
Trichloroethylene	TCLP	volatiles	0.5	mg/l	0.425
Vinyl chloride	TCLP	volatiles	0.2	mg/l	0.17

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13101212190326

Ship Date: 20FEB13
ActWgt: 10.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 21 FEB A2
PRIORITY OVERNIGHT

TRK# 7947 9648 0886
0201

ZA NCOA

02852
RI-US
PVD

518G1/DF24/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794796480886
Ship date: 02/20/2013
Estimated shipping charges: 23.86

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 10 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/09/2013

TRANSMITTAL NO.: 01450A-305

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
31	Waste Deter-413 Hancock St Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) CDE-OU1-WC-417HAN-C-051; CDE-OU1-WC-419HAN-D2-050; CDE-OU1-WC-413HAN-AB-052; CDE-OU1-WC-329HAN-B-053; CDE-OU1-WC-211NMK-D-054**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **03/12/13**

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
06-Mar-13 17:02

☐ Final Report
☐ Re-Issued Report
☑ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Spectrum Analytical, Inc.
646 Camp Ave.
North Kingstown, RI 02852
Attn: James Stadelmaier

Project: Duracell Inc - Sleepy Hollow, NY
Project #: M0236

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB65174-01	CDE-0U1-WC-413HAN-AB-052	Soil	22-Feb-13 11:20	27-Feb-13 16:20

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 23 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-413HAN-AB-052 SB65174-01	M0236	Soil	22-Feb-13 11:20	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed	Z-2a	N/A			1	SW846 1311	04-Mar-13	05-Mar-13	CMB	1304966	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 3.3	U, D	µg/l	5.0	3.3	5	SW846 1311/8260C	05-Mar-13	05-Mar-13	eq	1305002	X
78-93-3	2-Butanone (MEK)	< 8.7	U, D	µg/l	50.0	8.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 2.7	U, D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 3.3	U, D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 3.4	U, D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 3.9	U, D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 2.4	U, D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 3.7	U, D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 3.8	U, D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4.0	U, D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304701	X
	Final pH of leachate	5.02	B	N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	28-Feb-13	01-Mar-13	"	1304699	X
	Final pH of leachate	5.02	B	N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535													
106-46-7	1,4-Dichlorobenzene	< 0.350	U	µg/l	5.00	0.350	1	SW846 1311/8270D	04-Mar-13	05-Mar-13	MSL	1304884	X
121-14-2	2,4-Dinitrotoluene	< 0.730	U	µg/l	5.00	0.730	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 0.540	U	µg/l	5.00	0.540	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.430	U	µg/l	5.00	0.430	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 0.720	U	µg/l	5.00	0.720	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 0.770	U	µg/l	5.00	0.770	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 0.680	U	µg/l	10.0	0.680	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 0.440	U	µg/l	5.00	0.440	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 0.600	U	µg/l	5.00	0.600	1	"	"	"	"	"	X
110-86-1	Pyridine	< 0.850	U	µg/l	5.00	0.850	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 0.400	U	µg/l	5.00	0.400	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 0.760	U	µg/l	5.00	0.760	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*65*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*73*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*64*			*30-130 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	*103*			*30-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-413HAN-AB-052 SB65174-01	M0236	Soil	22-Feb-13 11:20	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304700	X
	Final pH of leachate	5.02	B	N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535													
58-89-9	gamma-BHC (Lindane)	< 0.026	U	µg/l	0.035	0.026	1	SW846 1311/8081B	04-Mar-13	04-Mar-13	TG	1304883	X
76-44-8	Heptachlor	< 0.028	U	µg/l	0.035	0.028	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.027	U	µg/l	0.035	0.027	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.028	U	µg/l	0.047	0.028	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.022	U	µg/l	0.047	0.022	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.261	U	µg/l	0.588	0.261	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.050	U	µg/l	0.412	0.050	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*76*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*68*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*77*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*64*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 13.4	U	µg/kg dry	26.8	13.4	1	SW846 8082A	28-Feb-13	04-Mar-13	BLM	1304605	X
11104-28-2	Aroclor-1221	< 24.2	U	µg/kg dry	26.8	24.2	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 17.2	U	µg/kg dry	26.8	17.2	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 15.8	U	µg/kg dry	26.8	15.8	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 13.2	U	µg/kg dry	26.8	13.2	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	292		µg/kg dry	26.8	22.4	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	192		µg/kg dry	26.8	16.6	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 25.0	U	µg/kg dry	26.8	25.0	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 8.42	U	µg/kg dry	26.8	8.42	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*125*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*120*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*145*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*135*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535									Methylation date: 04-Mar-13				
93-72-1	2,4,5-TP (Silvex)	< 0.0570	U	µg/l	0.100	0.0570	1	SW846 1311/8151A	04-Mar-13	05-Mar-13	TG	1304885	X
94-75-7	2,4-D	< 0.0840	U	µg/l	0.100	0.0840	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*45*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*40*			*30-150 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-413HAN-AB-052 SB65174-01	M0236	Soil	22-Feb-13 11:20	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
	Oil & Grease	< 53.6	U,OG	mg/kg dry	108	53.6	1	EPA 1664A	04-Mar-13	05-Mar-13	JK	1304864	
	Oil & Grease (ASTM)	< 39.9	U	mg/l	80.0	39.9	1	EPA 1664	04-Mar-13	05-Mar-13	JK	1304865	
Fingerprinting by GC Prepared by method SW846 3550C													
8006-61-9	Gasoline	< 20.1	U	mg/kg dry	34.3	20.1	1	SW846 8100Mod.	28-Feb-13	28-Feb-13	SEP	1304503	
68476-30-2	Fuel Oil #2	< 19.9	U	mg/kg dry	34.3	19.9	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 3.4	U	mg/kg dry	34.3	3.4	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 20.5	U	mg/kg dry	34.3	20.5	1	"	"	"	"	"	
M09800000	Motor Oil	< 18.7	U	mg/kg dry	34.3	18.7	1	"	"	"	"	"	
8032-32-4	Ligroin	< 8.6	U	mg/kg dry	34.3	8.6	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 8.6	U	mg/kg dry	34.3	8.6	1	"	"	"	"	"	
	Hydraulic Oil	< 3.4	U	mg/kg dry	34.3	3.4	1	"	"	"	"	"	
	Dielectric Fluid	< 8.6	U	mg/kg dry	34.3	8.6	1	"	"	"	"	"	
	Unidentified	64.1		mg/kg dry	34.3	8.6	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/kg dry	34.3	3.4	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	64.1		mg/kg dry	34.3	3.4	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*85*			*40-140 %*			"	"	"	"	"	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	µg/l			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304702	X
	Final pH of leachate	4,920	B	µg/l			1	"	"	"	"	"	
TCLP Extraction for Metals Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	"	"	"	"	X
	Final pH of leachate	4.92	B	N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 3.6	U	µg/l	10.0	3.6	1	SW846 1311/6010C	04-Mar-13	05-Mar-13	EDT	1304762	X
7440-38-2	Arsenic	12.8	R01, J	µg/l	14.0	6.2	1	"	"	"	"	"	X
7440-39-3	Barium	1,340	R01, J	µg/l	1400	0.6	1	"	"	"	"	"	X
7440-43-9	Cadmium	6.6		µg/l	5.0	0.3	1	"	"	"	"	"	X
7440-47-3	Chromium	< 6.6	U	µg/l	10.0	6.6	1	"	"	"	"	"	X
7440-50-8	Copper	34.2		µg/l	10.0	5.0	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.08	U	µg/l	0.20	0.08	1	SW846 1311/7470A	"	04-Mar-13	JLM	1304763	X
7440-02-0	Nickel	17.2		µg/l	10.0	1.3	1	SW846 1311/6010C	"	05-Mar-13	EDT	1304762	X
7439-92-1	Lead	380		µg/l	15.0	3.9	1	"	"	"	"	"	X
7782-49-2	Selenium	< 7.6	U	µg/l	30.0	7.6	1	"	"	"	"	"	X
7440-66-6	Zinc	1,390		µg/l	10.0	5.3	1	"	"	"	"	"	X
General Chemistry Parameters													
	ASTM Leaching	Completed		N/A			1	ASTM D3987-06	28-Feb-13	01-Mar-13	DJB	1304705	
	% Solids	74.4		%			1	SM2540 G Mod.	28-Feb-13	28-Feb-13	DT	1304671	
	Ammonia as N (ASTM)	< 0.165	U	mg/l	0.200	0.165	1	SM4500-NH3-B,C	05-Mar-13	05-Mar-13	ARG	1305046	
	Chemical Oxygen Demand (ASTM)	12.9		mg/l	5.00	1.62	1	HACH8000	06-Mar-13	06-Mar-13	CAA	1305081	
	Moisture	25.6		%			1	SM2540 G Mod. calculation	28-Feb-13	28-Feb-13	DT	1304676	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-413HAN-AB-052 SB65174-01	M0236	Soil	22-Feb-13 11:20	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	Total Solids	114		mg/l	5.00	4.33	1	SM2540 B	01-Mar-13	04-Mar-13	BD	1304786	
	Total Volatile Solids	14.5		%			1	SM2540 G	"	06-Mar-13	BD	1304785	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	04-Mar-13	04-Mar-13	VK	1304919	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	04-Mar-13 09:45	04-Mar-13 11:15	VK	1304921	X
	pH	6.83	pH	pH Units			1	SW846 9045D	27-Feb-13 17:15	27-Feb-13 18:55	BD	1304534	
Reactivity Cyanide/Sulfide													
Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	01-Mar-13	01-Mar-13	DJB	1304694	X
	Reactive Cyanide	< 24.9	U	mg/kg dry	24.9	24.9	1	"	"	"	"	"	X
	Reactive Sulfide	< 49.8	U	mg/kg dry	49.8	49.8	1	"	"	"	"	"	X

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/22/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHILDI

Date

2/22/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 2/22/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: OVERCAST, 32°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: ~~NO~~ LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE.

Planned Daily Activities: COLLECT WASTE CHARACTERIZATION SOIL SAMPLES AT RESIDENTIAL PROPERTIES.

Description of Chemical Data Acquisition Work Performed: TCLP VOC, SVOC METALS, PEST/HERB, TOTAL PCB, RECYANIDE, RESULFIDE, PH/IGNITABILITY.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEM LABS - OVERNIGHT VIA FED EX.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 2/22/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/22/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

2/22/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/22/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		2/22/13
CQC Systems Manager			9-22-13

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1310121219032 6

Ship Date: 22FEB13
ActWgt: 10.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SATURDAY ### A2
PRIORITY OVERNIGHT

TRK# 0201 7948 1677 6203

X0 NCOA

02852
RI-US
PVD

518G1/DF24/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794816776203
Ship date: 02/22/2013
Estimated shipping charges: 40.36

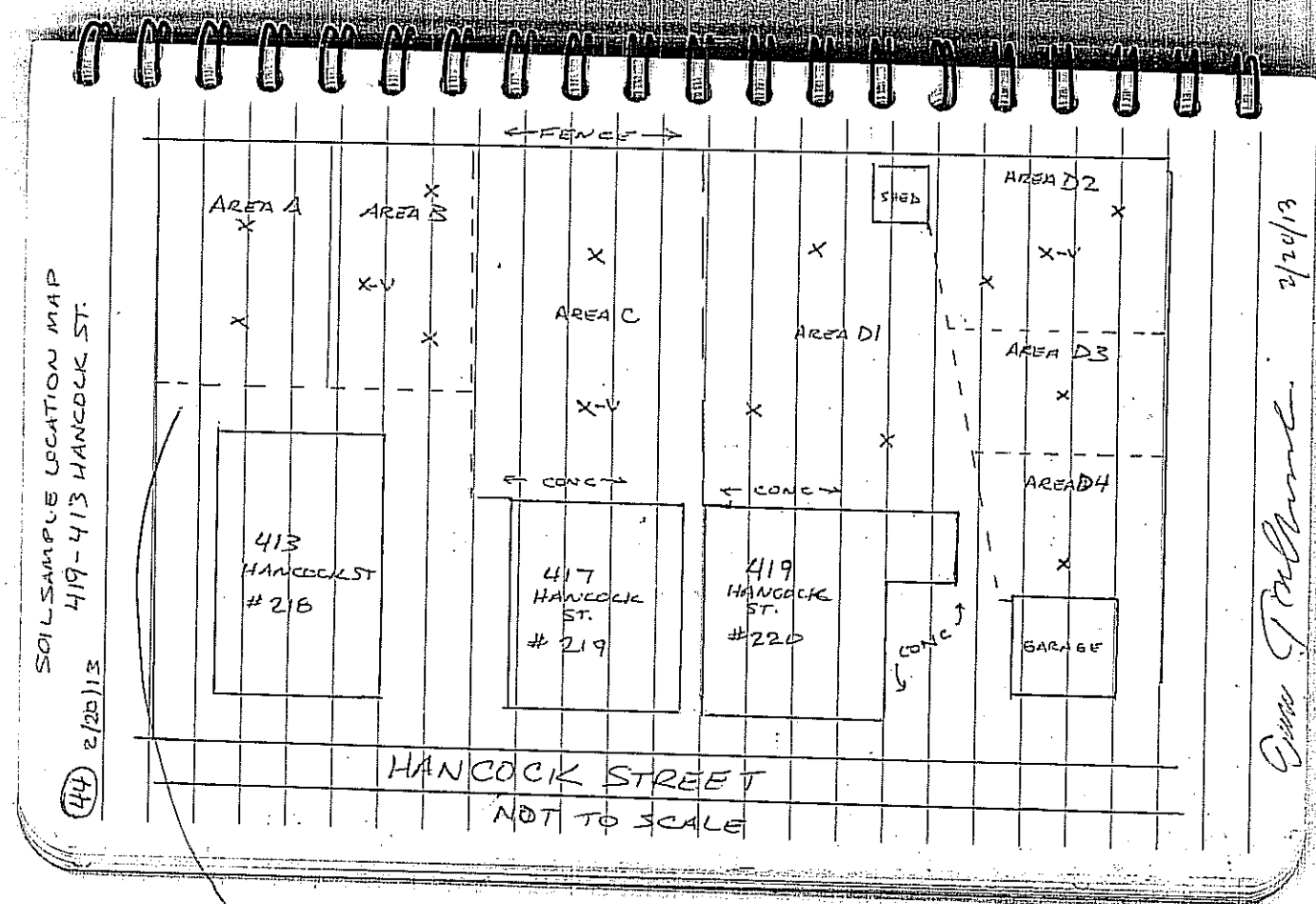
Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 10 LBS
Declared Value: 0.00 USD
Special Services: Saturday delivery
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.



SAMPLE CDE-OUI-WC-413HAN-AB-052
2/22/13 1120

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: ~~70~~ 9024 G278 RQN:

Project No. G278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= ICE 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below: 9

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	CDE-OU1-WC- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Analyses: * SEE ATTACHMENT FOR FULL LIST OF ANALYTICAL REQUIREMENTS *							
	413HAN-AB-052	2/22/13	1120	C	SO	1	3				X	X	X	X	X	X	X	X
	TEMP BLANK	2/22/13	1400			1					TEMP ONLY							

☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Relinquished by:	Received by:	Date:	Time:
E. TSCHUDI	FEDEX	2/22/13	1700

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

TABLE A - GROWS, TRRF, Pottstown

Parameter Name	Type	Category	Limits	Units	85% of Limit
Ignitibility	As Received		> 140	F	
Oil and Grease	As Received			mg/l	
Paint Filter Test	As Received		no free liquids		
PCB's	As Received		50	mg/kg	
pH	As Received		2 - 12.5	S.U.	
Reactive Cyanide	As Received		100	mg/l	
Reactive Sulfide	As Received		500	mg/l	
Total Solids	As Received				
Total Volatile Solids	As Received				
Ammonia-Nitrogen	ASTM		111111	mg/l	
Chemical Oxygen Demand	ASTM				
Oil and Grease	ASTM		88550	mg/l	
Total Solids	ASTM				
pH	TCLP				
Arsenic	TCLP	metals	5	mg/l	4.25
Barium	TCLP	metals	100	mg/l	85
Cadmium	TCLP	metals	1	mg/l	0.85
Chromium	TCLP	metals	5	mg/l	4.25
Copper	TCLP	metals	167	mg/l	142
Lead	TCLP	metals	5	mg/l	4.25
Mercury	TCLP	metals	0.2	mg/l	0.17
Nickel	TCLP	metals	242	mg/l	206
Selenium	TCLP	metals	1	mg/l	0.85
Silver	TCLP	metals	5	mg/l	4.25
Zinc	TCLP	metals	1875	mg/l	1594
2, 4-D	TCLP	herb	10	mg/l	8.5
2, 4, 5 -TP	TCLP	herb	1	mg/l	0.85
Chlordane	TCLP	pest	0.03	mg/l	0.0255
Endrin	TCLP	pest	0.02	mg/l	0.017
Heptachlor	TCLP	pest	0.008	mg/l	0.0068
Heptachlor Epoxide	TCLP	pest	0.008	mg/l	0.0068
Lindane	TCLP	pest	0.4	mg/l	0.34
Methoxychlor	TCLP	pest	10	mg/l	8.5
Toxaphene	TCLP	pest	0.5	mg/l	0.425
2, 4, 5-trichlorophenol	TCLP	acids	400	mg/l	340
2, 4, 6-trichlorophenol	TCLP	acids	2	mg/l	1.7
m-cresol	TCLP	acids	200	mg/l	170
o-cresol	TCLP	acids	200	mg/l	170
p-cresol	TCLP	acids	200	mg/l	170
Pentachlorophenol	TCLP	acids	100	mg/l	85
2, 4-dinitrotoluene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobenzene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobutadiene	TCLP	base/neutral	0.5	mg/l	0.425
Hexachloroethane	TCLP	base/neutral	3	mg/l	2.55
Nitrobenzene	TCLP	base/neutral	2	mg/l	1.7
Pyridine	TCLP	base/neutral	5	mg/l	4.25
1,1-dichloroethylene	TCLP	volatiles	0.7	mg/l	0.595
1,2-dichloroethane	TCLP	volatiles	0.5	mg/l	0.425
1,4-dichlorobenzene	TCLP	volatiles	7.5	mg/l	6.375
Benzene	TCLP	volatiles	0.5	mg/l	0.425
Carbon Tetrachloride	TCLP	volatiles	0.5	mg/l	0.425
Chlorobenzene	TCLP	volatiles	100	mg/l	85
Chloroform	TCLP	volatiles	8	mg/l	6.8
Methyl ethyl ketone	TCLP	volatiles	200	mg/l	170
Tetrachloroethylene	TCLP	volatiles	0.7	mg/l	0.595
Trichloroethylene	TCLP	volatiles	0.5	mg/l	0.425
Vinyl chloride	TCLP	volatiles	0.2	mg/l	0.17

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/09/2013

TRANSMITTAL NO.: 01450A-307

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
33	Waste Deter-211 New Market Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For:	Sample ID(s) CDE-OU1-WC-417HAN-C-051; CDE-OU1-WC-419HAN-D2-050; CDE-OU1-WC-413HAN-AB-052; CDE-OU1-WC-329HAN-B-053; CDE-OU1-WC-211NMK-D-054
Prepared By:	Ken Paisley
CC:	Kim Lickfield
Date:	03/12/13

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
06-Mar-13 16:52

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Spectrum Analytical, Inc.
646 Camp Ave.
North Kingstown, RI 02852
Attn: James Stadelmaier

Project: Duracell Inc - Sleepy Hollow, NY
Project #: M0251

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~SB65173-01~~	~~CDE-0U1-WC-329HAN-D-053~~	~~Soil~~	~~25-Feb-13 14:00~~	~~27-Feb-13 16:30~~
SB65173-02	CDE-0U1-WC-211NMK-D-054	Soil	25-Feb-13 15:00	27-Feb-13 16:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 30 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-211NMK-D-054 SB65173-02	M0251	Soil	25-Feb-13 15:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed	Z-2a	N/A			1	SW846 1311	04-Mar-13	05-Mar-13	CMB	1304966	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 3.3	U, D	µg/l	5.0	3.3	5	SW846 1311/8260C	06-Mar-13	06-Mar-13	eq	1305099	X
78-93-3	2-Butanone (MEK)	< 8.7	U, D	µg/l	50.0	8.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 2.7	U, D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 3.3	U, D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 3.4	U, D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 3.9	U, D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 2.4	U, D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 3.7	U, D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 3.8	U, D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4.0	U, D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*103*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304701	X
	Final pH of leachate	5.03	B	N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	28-Feb-13	01-Mar-13	"	1304699	X
	Final pH of leachate	5.03	B	N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535													
106-46-7	1,4-Dichlorobenzene	< 0.350	U	µg/l	5.00	0.350	1	SW846 1311/8270D	04-Mar-13	05-Mar-13	MSL	1304884	X
121-14-2	2,4-Dinitrotoluene	< 0.730	U	µg/l	5.00	0.730	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 0.540	U	µg/l	5.00	0.540	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.430	U	µg/l	5.00	0.430	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 0.720	U	µg/l	5.00	0.720	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 0.770	U	µg/l	5.00	0.770	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 0.680	U	µg/l	10.0	0.680	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 0.440	U	µg/l	5.00	0.440	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 0.600	U	µg/l	5.00	0.600	1	"	"	"	"	"	X
110-86-1	Pyridine	< 0.850	U	µg/l	5.00	0.850	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 0.400	U	µg/l	5.00	0.400	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 0.760	U	µg/l	5.00	0.760	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*81*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*95*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*82*			*30-130 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	*103*			*30-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-211NMK-D-054 SB65173-02	M0251	Soil	25-Feb-13 15:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304700	X
	Final pH of leachate	5.03	B	N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535													
58-89-9	gamma-BHC (Lindane)	< 0.024	U	µg/l	0.032	0.024	1	SW846 1311/8081B	04-Mar-13	04-Mar-13	TG	1304883	X
76-44-8	Heptachlor	< 0.025	U	µg/l	0.032	0.025	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.024	U	µg/l	0.032	0.024	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.026	U	µg/l	0.043	0.026	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.020	U	µg/l	0.043	0.020	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.240	U	µg/l	0.541	0.240	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.046	U	µg/l	0.378	0.046	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*82*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*78*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*85*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*79*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 12.0	U	µg/kg dry	23.9	12.0	1	SW846 8082A	28-Feb-13	04-Mar-13	BLM	1304605	X
11104-28-2	Aroclor-1221	< 21.6	U	µg/kg dry	23.9	21.6	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 15.4	U	µg/kg dry	23.9	15.4	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 14.1	U	µg/kg dry	23.9	14.1	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 11.7	U	µg/kg dry	23.9	11.7	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254 [2C]	412		µg/kg dry	23.9	10.2	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260 [2C]	226		µg/kg dry	23.9	10.7	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 22.3	U	µg/kg dry	23.9	22.3	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 7.52	U	µg/kg dry	23.9	7.52	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*130*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*125*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*95*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*105*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535									Methylation date: 04-Mar-13				
93-72-1	2,4,5-TP (Silvex)	< 0.0600	U	µg/l	0.105	0.0600	1	SW846 1311/8151A	04-Mar-13	05-Mar-13	TG	1304885	X
94-75-7	2,4-D	< 0.0884	U	µg/l	0.105	0.0884	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*40*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*35*			*30-150 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-211NMK-D-054 SB65173-02	M0251	Soil	25-Feb-13 15:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
	Oil & Grease	63.4	J,OG	mg/kg dry	98.1	46.9	1	EPA 1664A	04-Mar-13	05-Mar-13	JK	1304864	
	Oil & Grease (ASTM)	< 39.9	U	mg/l	80.0	39.9	1	EPA 1664	04-Mar-13	05-Mar-13	JK	1304865	
Fingerprinting by GC Prepared by method SW846 3550C													
8006-61-9	Gasoline	< 18.9	U	mg/kg dry	32.3	18.9	1	SW846 8100Mod.	28-Feb-13	28-Feb-13	SEP	1304603	
68476-30-2	Fuel Oil #2	< 18.8	U	mg/kg dry	32.3	18.8	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 3.2	U	mg/kg dry	32.3	3.2	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 19.3	U	mg/kg dry	32.3	19.3	1	"	"	"	"	"	
M09800000	Motor Oil	< 17.6	U	mg/kg dry	32.3	17.6	1	"	"	"	"	"	
8032-32-4	Ligroin	< 8.1	U	mg/kg dry	32.3	8.1	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 8.1	U	mg/kg dry	32.3	8.1	1	"	"	"	"	"	
	Hydraulic Oil	< 3.2	U	mg/kg dry	32.3	3.2	1	"	"	"	"	"	
	Dielectric Fluid	< 8.1	U	mg/kg dry	32.3	8.1	1	"	"	"	"	"	
	Unidentified	269		mg/kg dry	32.3	8.1	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/kg dry	32.3	3.2	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	269		mg/kg dry	32.3	3.2	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*85*			*40-140 %*			"	"	"	"	"	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	µg/l			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304702	X
	Final pH of leachate	4,970	B	µg/l			1	"	"	"	"	"	
TCLP Extraction for Metals Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	"	"	"	"	X
	Final pH of leachate	4.97	B	N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 3.6	U	µg/l	10.0	3.6	1	SW846 1311/6010C	04-Mar-13	05-Mar-13	EDT	1304762	X
7440-38-2	Arsenic	13.0	R01, J	µg/l	14.0	6.2	1	"	"	"	"	"	X
7440-39-3	Barium	1,220	R01, J	µg/l	1400	0.6	1	"	"	"	"	"	X
7440-43-9	Cadmium	6.7		µg/l	5.0	0.3	1	"	"	"	"	"	X
7440-47-3	Chromium	< 6.6	U	µg/l	10.0	6.6	1	"	"	"	"	"	X
7440-50-8	Copper	12.1		µg/l	10.0	5.0	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.08	U	µg/l	0.20	0.08	1	SW846 1311/7470A	"	04-Mar-13	JLM	1304763	X
7440-02-0	Nickel	7.1	J	µg/l	10.0	1.3	1	SW846 1311/6010C	"	05-Mar-13	EDT	1304762	X
7439-92-1	Lead	48.3		µg/l	15.0	3.9	1	"	"	"	"	"	X
7782-49-2	Selenium	< 7.6	U	µg/l	30.0	7.6	1	"	"	"	"	"	X
7440-66-6	Zinc	1,820		µg/l	10.0	5.3	1	"	"	"	"	"	X
General Chemistry Parameters													
	ASTM Leaching	Completed		N/A			1	ASTM D3987-06	28-Feb-13	01-Mar-13	DJB	1304705	
	% Solids	81.6		%			1	SM2540 G Mod.	28-Feb-13	28-Feb-13	DT	1304671	
	Ammonia as N (ASTM)	< 0.165	U	mg/l	0.200	0.165	1	SM4500-NH3-B,C	05-Mar-13	05-Mar-13	ARG	1305046	
	Chemical Oxygen Demand (ASTM)	14.0		mg/l	5.00	1.62	1	HACH8000	06-Mar-13	06-Mar-13	CAA	1305081	
	Moisture	18.4		%			1	SM2540 G Mod. calculation	28-Feb-13	28-Feb-13	DT	1304676	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-211NMK-D-054 SB65173-02	M0251	Soil	25-Feb-13 15:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	Total Solids	120		mg/l	5.00	4.33	1	SM2540 B	01-Mar-13	04-Mar-13	BD	1304786	
	Total Volatile Solids	5.18		%			1	SM2540 G	"	06-Mar-13	BD	1304785	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	04-Mar-13	04-Mar-13	VK	1304919	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	04-Mar-13 09:45	04-Mar-13 11:15	VK	1304921	X
	pH	6.95	pH	pH Units			1	SW846 9045D	27-Feb-13 17:15	27-Feb-13 18:47	BD	1304534	
Reactivity Cyanide/Sulfide Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	01-Mar-13	01-Mar-13	DJB	1304694	X
	Reactive Cyanide	< 24.5	U	mg/kg dry	24.5	24.5	1	"	"	"	"	"	X
	Reactive Sulfide	< 49.0	U	mg/kg dry	49.0	49.0	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/25/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms 2/25/13	~~X~~		X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

2/25/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 2/25/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY CLOUDY – 43°F. WINDY – GUSTS TO APPROX 20 MPH.

Subcontractors Present Onsite: NONE.

Health and Safety Measures Necessary for Planned Activities: BASIC PPE REQUIRED. LEVEL D UTILIZED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT WASTE CHARACTERIZATION SOIL SAMPLES FROM RESIDENTIAL PROPERTIES AS ASSOCIATED WITH OU1 RESIDENTIAL WORK.

Description of Chemical Data Acquisition Work Performed: TCLP VOC, SVOC, METALS, PEST/HERB, TOTAL PCBs, REACTIVE CYANIDE, REACTIVE SULFIDE, pH, IGNITABILITY.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLE SHIPPED VIA FED EX OVERNIGHT TOMORROW (2/26). SAMPLES WILL BE STORED ON ICE, SECURED OVERNIGHT.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

[signature] 2/25/18

Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/25/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

2/25/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/25/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI [signature] 2/25/13
Name Signature Date

CQC Systems Manager _____
Name Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5-DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
9087695301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: 62789024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (CDE-001-WC-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Analyses: * SEE ATTACHMENT * FOR FULL LIST OF PA FORM U ANALYTICAL REQUIREMENTS						
	329HAN-B-053	2/25/13	1400	C	SO	1	W					X	X	X	X	X	X
	211NMK-D-054	2/25/13	1500	C	SO	1	W					X	X	X	X	X	X
	TEMP BLANK	2/25/13				1											

☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C.

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FED EX	~~2/26/13~~ 2/26/13	1700

TABLE A - GROWS, TRRF, Pottstown

Parameter Name	Type	Category	Limits	Units	85% of Limit
Ignitibility	As Received		> 140	F	
Oil and Grease	As Received			mg/l	
Paint Filter Test	As Received		no free liquids		
PCB's	As Received		50	mg/kg	
pH	As Received		2 - 12.5	S.U.	
Reactive Cyanide	As Received		100	mg/l	
Reactive Sulfide	As Received		500	mg/l	
Total Solids	As Received				
Total Volatile Solids	As Received				
Ammonia-Nitrogen	ASTM		111111	mg/l	
Chemical Oxygen Demand	ASTM				
Oil and Grease	ASTM		88550	mg/l	
Total Solids	ASTM				
pH	TCLP				
Arsenic	TCLP	metals	5	mg/l	4.25
Barium	TCLP	metals	100	mg/l	85
Cadmium	TCLP	metals	1	mg/l	0.85
Chromium	TCLP	metals	5	mg/l	4.25
Copper	TCLP	metals	167	mg/l	142
Lead	TCLP	metals	5	mg/l	4.25
Mercury	TCLP	metals	0.2	mg/l	0.17
Nickel	TCLP	metals	242	mg/l	206
Selenium	TCLP	metals	1	mg/l	0.85
Silver	TCLP	metals	5	mg/l	4.25
Zinc	TCLP	metals	1875	mg/l	1594
2, 4-D	TCLP	herb	10	mg/l	8.5
2, 4, 5 -TP	TCLP	herb	1	mg/l	0.85
Chlordane	TCLP	pest	0.03	mg/l	0.0255
Endrin	TCLP	pest	0.02	mg/l	0.017
Heptachlor	TCLP	pest	0.008	mg/l	0.0068
Heptachlor Epoxide	TCLP	pest	0.008	mg/l	0.0068
Lindane	TCLP	pest	0.4	mg/l	0.34
Methoxychlor	TCLP	pest	10	mg/l	8.5
Toxaphene	TCLP	pest	0.5	mg/l	0.425
2, 4, 5-trichlorophenol	TCLP	acids	400	mg/l	340
2, 4, 6-trichlorophenol	TCLP	acids	2	mg/l	1.7
m-cresol	TCLP	acids	200	mg/l	170
o-cresol	TCLP	acids	200	mg/l	170
p-cresol	TCLP	acids	200	mg/l	170
Pentachlorophenol	TCLP	acids	100	mg/l	85
2, 4-dinitrotoluene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobenzene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobutadiene	TCLP	base/neutral	0.5	mg/l	0.425
Hexachloroethane	TCLP	base/neutral	3	mg/l	2.55
Nitrobenzene	TCLP	base/neutral	2	mg/l	1.7
Pyridine	TCLP	base/neutral	5	mg/l	4.25
1,1-dichloroethylene	TCLP	volatiles	0.7	mg/l	0.595
1,2-dichloroethane	TCLP	volatiles	0.5	mg/l	0.425
1,4-dichlorobenzene	TCLP	volatiles	7.5	mg/l	6.375
Benzene	TCLP	volatiles	0.5	mg/l	0.425
Carbon Tetrachloride	TCLP	volatiles	0.5	mg/l	0.425
Chlorobenzene	TCLP	volatiles	100	mg/l	85
Chloroform	TCLP	volatiles	8	mg/l	6.8
Methyl ethyl ketone	TCLP	volatiles	200	mg/l	170
Tetrachloroethylene	TCLP	volatiles	0.7	mg/l	0.595
Trichloroethylene	TCLP	volatiles	0.5	mg/l	0.425
Vinyl chloride	TCLP	volatiles	0.2	mg/l	0.17

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1310121219032 6

Ship Date: 26FEB13
ActWgt: 10.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 27 FEB 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7948 3609 6892

ZA NCOA

02852
RI-US
PVD

51BG2/DCF8/93AB

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794836096892
Ship date: 02/26/2013
Estimated shipping charges: 23.86

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 10 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

50

211 NEW MARKET AVE.
SAMPLE LOCATION MAP

329 HANCOCK ST.
SAMPLE LOCATION MAP

51

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/09/2013

TRANSMITTAL NO.: 01450A-306

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
32	Waste Deter-329 Hancock St Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: Sample ID(s) CDE-OU1-WC-417HAN-C-051; CDE-OU1-WC-419HAN-D2-050; CDE-OU1-WC-413HAN-AB-052; CDE-OU1-WC-329HAN-B-053; CDE-OU1-WC-211NMK-D-054

Prepared By: Ken Paisley

CC: Kim Lickfield

Date: 03/12/13

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Report Date:
06-Mar-13 16:52

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Spectrum Analytical, Inc.
646 Camp Ave.
North Kingstown, RI 02852
Attn: James Stadelmaier

Project: Duracell Inc - Sleepy Hollow, NY
Project #: M0251

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB65173-01	CDE-0U1-WC-329HAN-B-053	Soil	25-Feb-13 14:00	27-Feb-13 16:30
~~SB65173-02~~	~~CDE-0U1-WC-3UNMK-D-054~~	~~Soil~~	~~25-Feb-13 15:00~~	~~27-Feb-13 16:30~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 30 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-329HAN-B-053 SB65173-01	M0251	Soil	25-Feb-13 14:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
	TCLP Extraction	Completed	Z-2a	N/A			1	SW846 1311	04-Mar-13	05-Mar-13	CMB	1304966	X
TCLP Volatile Organic Compounds by GC/MS(TCL)													
Prepared by method SW846 5030 Water MS						Initial weight: 5 ml							
71-43-2	Benzene	< 3.3	U, D	µg/l	5.0	3.3	5	SW846 1311/8260C	06-Mar-13	06-Mar-13	eq	1305099	X
78-93-3	2-Butanone (MEK)	< 8.7	U, D	µg/l	50.0	8.7	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 2.7	U, D	µg/l	5.0	2.7	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 3.3	U, D	µg/l	5.0	3.3	5	"	"	"	"	"	X
67-66-3	Chloroform	< 3.4	U, D	µg/l	5.0	3.4	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 3.9	U, D	µg/l	5.0	3.9	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 2.4	U, D	µg/l	5.0	2.4	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 3.7	U, D	µg/l	5.0	3.7	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 3.8	U, D	µg/l	5.0	3.8	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4.0	U, D	µg/l	5.0	4.0	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*101*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*97*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
TCLP Extraction													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304701	X
	Final pH of leachate	5.01	B	N/A			1	"	"	"	"	"	
TCLP Extraction for Semivolatiles													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	28-Feb-13	01-Mar-13	"	1304699	X
	Final pH of leachate	5.01	B	N/A			1	"	"	"	"	"	
TCLP Semivolatiles (TCL)													
Prepared by method SW846 3535													
106-46-7	1,4-Dichlorobenzene	< 0.350	U	µg/l	5.00	0.350	1	SW846 1311/8270D	04-Mar-13	05-Mar-13	MSL	1304684	X
121-14-2	2,4-Dinitrotoluene	< 0.730	U	µg/l	5.00	0.730	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 0.540	U	µg/l	5.00	0.540	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.430	U	µg/l	5.00	0.430	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 0.720	U	µg/l	5.00	0.720	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 0.770	U	µg/l	5.00	0.770	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 0.680	U	µg/l	10.0	0.680	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 0.440	U	µg/l	5.00	0.440	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 0.600	U	µg/l	5.00	0.600	1	"	"	"	"	"	X
110-86-1	Pyridine	< 0.850	U	µg/l	5.00	0.850	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 0.400	U	µg/l	5.00	0.400	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 0.760	U	µg/l	5.00	0.760	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*81*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*94*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*81*			*30-130 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-d14*	*99*			*30-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

* Reportable Detection Limit

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-329HAN-B-053 SB65173-01	M0251	Soil	25-Feb-13 14:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
TCLP Extraction for Herbicides													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304700	X
	Final pH of leachate	5.01	B	N/A			1	"	"	"	"	"	
TCLP Pesticides													
Prepared by method SW846 3535													
58-89-9	gamma-BHC (Lindane)	< 0.026	U	µg/l	0.035	0.026	1	SW846 1311/8081B	04-Mar-13	04-Mar-13	TG	1304883	X
76-44-8	Heptachlor	< 0.028	U	µg/l	0.035	0.028	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.027	U	µg/l	0.035	0.027	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.028	U	µg/l	0.047	0.028	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.022	U	µg/l	0.047	0.022	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.261	U	µg/l	0.588	0.261	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.050	U	µg/l	0.412	0.050	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*72*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*76*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*75*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*66*			*30-150 %*			"	"	"	"	"	
Polychlorinated Biphenyls													
Prepared by method SW846 3545A													
12674-11-2	Aroclor-1016	< 12.3	U	µg/kg dry	24.7	12.3	1	SW846 8082A	28-Feb-13	04-Mar-13	BLM	1304605	X
11104-28-2	Aroclor-1221	< 22.2	U	µg/kg dry	24.7	22.2	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 15.8	U	µg/kg dry	24.7	15.8	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 14.5	U	µg/kg dry	24.7	14.5	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 12.1	U	µg/kg dry	24.7	12.1	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254 [2C]	215		µg/kg dry	24.7	10.5	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 15.3	U	µg/kg dry	24.7	15.3	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 23.0	U	µg/kg dry	24.7	23.0	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 7.75	U	µg/kg dry	24.7	7.75	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*125*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*125*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*100*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*130*			*30-150 %*			"	"	"	"	"	
TCLP Herbicides													
Prepared by method SW846 3535									Methylation date: 04-Mar-13				
93-72-1	2,4,5-TP (Silvex)	< 0.0600	U	µg/l	0.105	0.0600	1	SW846 1311/8151A	04-Mar-13	05-Mar-13	TG	1304885	X
94-75-7	2,4-D	< 0.0884	U	µg/l	0.105	0.0884	1	"	"	"	"	"	X
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*45*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*40*			*30-150 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-329HAN-B-053 SB65173-01	M0251	Soil	25-Feb-13 14:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
	Oil & Grease	164	OG	mg/kg dry	101	50.5	1	EPA 1664A	04-Mar-13	05-Mar-13	JK	1304864	
	Oil & Grease (ASTM)	< 39.9	U	mg/l	80.0	39.9	1	EPA 1664	04-Mar-13	05-Mar-13	JK	1304865	
Fingerprinting by GC													
Prepared by method SW846 3550C													
8006-61-9	Gasoline	< 19.5	U	mg/kg dry	33.2	19.5	1	SW846 8100Mod.	28-Feb-13	28-Feb-13	SEP	1304603	
68476-30-2	Fuel Oil #2	< 19.3	U	mg/kg dry	33.2	19.3	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 3.3	U	mg/kg dry	33.2	3.3	1	"	"	"	"	"	
68553-00-4	Fuel Oil #6	< 19.8	U	mg/kg dry	33.2	19.8	1	"	"	"	"	"	
M009800000	Motor Oil	< 18.2	U	mg/kg dry	33.2	18.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 8.3	U	mg/kg dry	33.2	8.3	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 8.3	U	mg/kg dry	33.2	8.3	1	"	"	"	"	"	
	Hydraulic Oil	< 3.3	U	mg/kg dry	33.2	3.3	1	"	"	"	"	"	
	Dielectric Fluid	< 8.3	U	mg/kg dry	33.2	8.3	1	"	"	"	"	"	
	Unidentified	276		mg/kg dry	33.2	8.3	1	"	"	"	"	"	
	Other Oil	Calculated as		mg/kg dry	33.2	3.3	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	276		mg/kg dry	33.2	3.3	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*72*			*40-140 %*			"	"	"	"	"	
TCLP Metals by EPA 1311 & 6000/7000 Series Methods													
TCLP Extraction for Hg													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	µg/l			1	SW846 1311	28-Feb-13	01-Mar-13	DJB	1304702	X
	Final pH of leachate	4.950	B	µg/l			1	"	"	"	"	"	
TCLP Extraction for Metals													
Prepared by method SW846 1311													
	TCLP Extraction	Completed	ExL	N/A			1	"	"	"	"	"	X
	Final pH of leachate	4.95	B	N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 3.6	U	µg/l	10.0	3.6	1	SW846 1311/6010C	04-Mar-13	05-Mar-13	EDT	1304762	X
7440-38-2	Arsenic	10.7	R01, J	µg/l	14.0	6.2	1	"	"	"	"	"	X
7440-39-3	Barium	784	R01, J	µg/l	1400	0.6	1	"	"	"	"	"	X
7440-43-9	Cadmium	9.7		µg/l	5.0	0.3	1	"	"	"	"	"	X
7440-47-3	Chromium	< 6.6	U	µg/l	10.0	6.6	1	"	"	"	"	"	X
7440-50-8	Copper	33.8		µg/l	10.0	5.0	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.08	U	µg/l	0.20	0.08	1	SW846 1311/7470A	"	04-Mar-13	JLM	1304763	X
7440-02-0	Nickel	8.2	J	µg/l	10.0	1.3	1	SW846 1311/6010C	"	05-Mar-13	EDT	1304762	X
7439-92-1	Lead	298		µg/l	15.0	3.9	1	"	"	"	"	"	X
7782-49-2	Selenium	< 7.6	U	µg/l	30.0	7.6	1	"	"	"	"	"	X
7440-66-6	Zinc	550		µg/l	10.0	5.3	1	"	"	"	"	"	X
General Chemistry Parameters													
	ASTM Leaching	Completed		N/A			1	ASTM D3987-06	28-Feb-13	01-Mar-13	DJB	1304705	
	% Solids	79.0		%			1	SM2540 G Mod.	28-Feb-13	28-Feb-13	DT	1304671	
	Ammonia as N (ASTM)	< 0.165	U	mg/l	0.200	0.165	1	SM4500-NH3-B,C	05-Mar-13	05-Mar-13	ARG	1305046	
	Chemical Oxygen Demand (ASTM)	15.8		mg/l	5.00	1.62	1	HACH8000	06-Mar-13	06-Mar-13	CAA	1305081	
	Moisture	21.0		%			1	SM2540 G Mod. calculation	28-Feb-13	28-Feb-13	DT	1304676	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
CDE-0U1-WC-329HAN-B-053 SB65173-01	M0251	Soil	25-Feb-13 14:00	27-Feb-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	Total Solids	146		mg/l	5.00	4.33	1	SM2540 B	01-Mar-13	04-Mar-13	BD	1304786	
	Total Volatile Solids	8.99		%			1	SM2540 G	"	06-Mar-13	BD	1304785	
Toxicity Characteristics													
	Free Liquid	Absent		N/A			1	SW846 9095B	04-Mar-13	04-Mar-13	VK	1304919	X
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	04-Mar-13 09:45	04-Mar-13 11:15	VK	1304921	X
	pH	6.28	pH	pH Units			1	SW846 9045D	27-Feb-13 17:15	27-Feb-13 18:44	BD	1304534	
Reactivity Cyanide/Sulfide													
Prepared by method General Preparation													
	Reactivity	Nonreactive		mg/kg dry			1	SW846 Ch. 7.3	01-Mar-13	01-Mar-13	DJB	1304694	X
	Reactive Cyanide	< 24.8	U	mg/kg dry	24.8	24.8	1	"	"	"	"	"	X
	Reactive Sulfide	< 49.6	U	mg/kg dry	49.6	49.6	1	"	"	"	"	"	X

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/25/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms 2/25/13	~~X~~		X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

2/25/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 2/25/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY CLOUDY – 43°F. WINDY – GUSTS TO APPROX 20 MPH.

Subcontractors Present Onsite: NONE.

Health and Safety Measures Necessary for Planned Activities: BASIC PPE REQUIRED. LEVEL D UTILIZED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT WASTE CHARACTERIZATION SOIL SAMPLES FROM RESIDENTIAL PROPERTIES AS ASSOCIATED WITH OU1 RESIDENTIAL WORK.

Description of Chemical Data Acquisition Work Performed: TCLP VOC, SVOC, METALS, PEST/HERB, TOTAL PCBs, REACTIVE CYANIDE, REACTIVE SULFIDE, pH, IGNITABILITY.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLE SHIPPED VIA FED EX OVERNIGHT TOMORROW (2/26). SAMPLES WILL BE STORED ON ICE, SECURED OVERNIGHT.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 2/25/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/25/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

2/25/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/25/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI [signature] 2/25/13
Name Signature Date

CQC Systems Manager _____
Name Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5-DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G2789024 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-WC-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: * SEE ATTACHMENT * FOR FULL LIST OF PA FORM U ANALYTICAL REQUIREMENTS						
	329HAN-B-053	2/25/13	1400	C	SO	1	3				X	X	X	X	X	X
	211NMK-D-054	2/25/13	1500	C	SO	1	3				X	X	X	X	X	X
	TEMP BLANK	2/25/13				1										

☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FED EX	~~2/26/13~~ 2/26/13	1700

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

TABLE A - GROWS, TRRF, Pottstown

Parameter Name	Type	Category	Limits	Units	85% of Limit
Ignitibility	As Received		> 140	F	
Oil and Grease	As Received			mg/l	
Paint Filter Test	As Received		no free liquids		
PCB's	As Received		50	mg/kg	
pH	As Received		2 - 12.5	S.U.	
Reactive Cyanide	As Received		100	mg/l	
Reactive Sulfide	As Received		500	mg/l	
Total Solids	As Received				
Total Volatile Solids	As Received				
Ammonia-Nitrogen	ASTM		111111	mg/l	
Chemical Oxygen Demand	ASTM				
Oil and Grease	ASTM		88550	mg/l	
Total Solids	ASTM				
pH	TCLP				
Arsenic	TCLP	metals	5	mg/l	4.25
Barium	TCLP	metals	100	mg/l	85
Cadmium	TCLP	metals	1	mg/l	0.85
Chromium	TCLP	metals	5	mg/l	4.25
Copper	TCLP	metals	167	mg/l	142
Lead	TCLP	metals	5	mg/l	4.25
Mercury	TCLP	metals	0.2	mg/l	0.17
Nickel	TCLP	metals	242	mg/l	206
Selenium	TCLP	metals	1	mg/l	0.85
Silver	TCLP	metals	5	mg/l	4.25
Zinc	TCLP	metals	1875	mg/l	1594
2, 4-D	TCLP	herb	10	mg/l	8.5
2, 4, 5 -TP	TCLP	herb	1	mg/l	0.85
Chlordane	TCLP	pest	0.03	mg/l	0.0255
Endrin	TCLP	pest	0.02	mg/l	0.017
Heptachlor	TCLP	pest	0.008	mg/l	0.0068
Heptachlor Epoxide	TCLP	pest	0.008	mg/l	0.0068
Lindane	TCLP	pest	0.4	mg/l	0.34
Methoxychlor	TCLP	pest	10	mg/l	8.5
Toxaphene	TCLP	pest	0.5	mg/l	0.425
2, 4, 5-trichlorophenol	TCLP	acids	400	mg/l	340
2, 4, 6-trichlorophenol	TCLP	acids	2	mg/l	1.7
m-cresol	TCLP	acids	200	mg/l	170
o-cresol	TCLP	acids	200	mg/l	170
p-cresol	TCLP	acids	200	mg/l	170
Pentachlorophenol	TCLP	acids	100	mg/l	85
2, 4-dinitrotoluene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobenzene	TCLP	base/neutral	0.13	mg/l	0.1105
Hexachlorobutadiene	TCLP	base/neutral	0.5	mg/l	0.425
Hexachloroethane	TCLP	base/neutral	3	mg/l	2.55
Nitrobenzene	TCLP	base/neutral	2	mg/l	1.7
Pyridine	TCLP	base/neutral	5	mg/l	4.25
1,1-dichloroethylene	TCLP	volatiles	0.7	mg/l	0.595
1,2-dichloroethane	TCLP	volatiles	0.5	mg/l	0.425
1,4-dichlorobenzene	TCLP	volatiles	7.5	mg/l	6.375
Benzene	TCLP	volatiles	0.5	mg/l	0.425
Carbon Tetrachloride	TCLP	volatiles	0.5	mg/l	0.425
Chlorobenzene	TCLP	volatiles	100	mg/l	85
Chloroform	TCLP	volatiles	8	mg/l	6.8
Methyl ethyl ketone	TCLP	volatiles	200	mg/l	170
Tetrachloroethylene	TCLP	volatiles	0.7	mg/l	0.595
Trichloroethylene	TCLP	volatiles	0.5	mg/l	0.425
Vinyl chloride	TCLP	volatiles	0.2	mg/l	0.17

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13101212190326

Ship Date: 26FEB13
ActWgt: 10.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

WED - 27 FEB 10:30A
PRIORITY OVERNIGHT

TRK# 7948 3609 6892
0201

ZA NCOA

02852
RI-US
PVD

518G2/DCF8/93A8

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794836096892
Ship date: 02/26/2013
Estimated shipping charges: 23.86

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 10 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

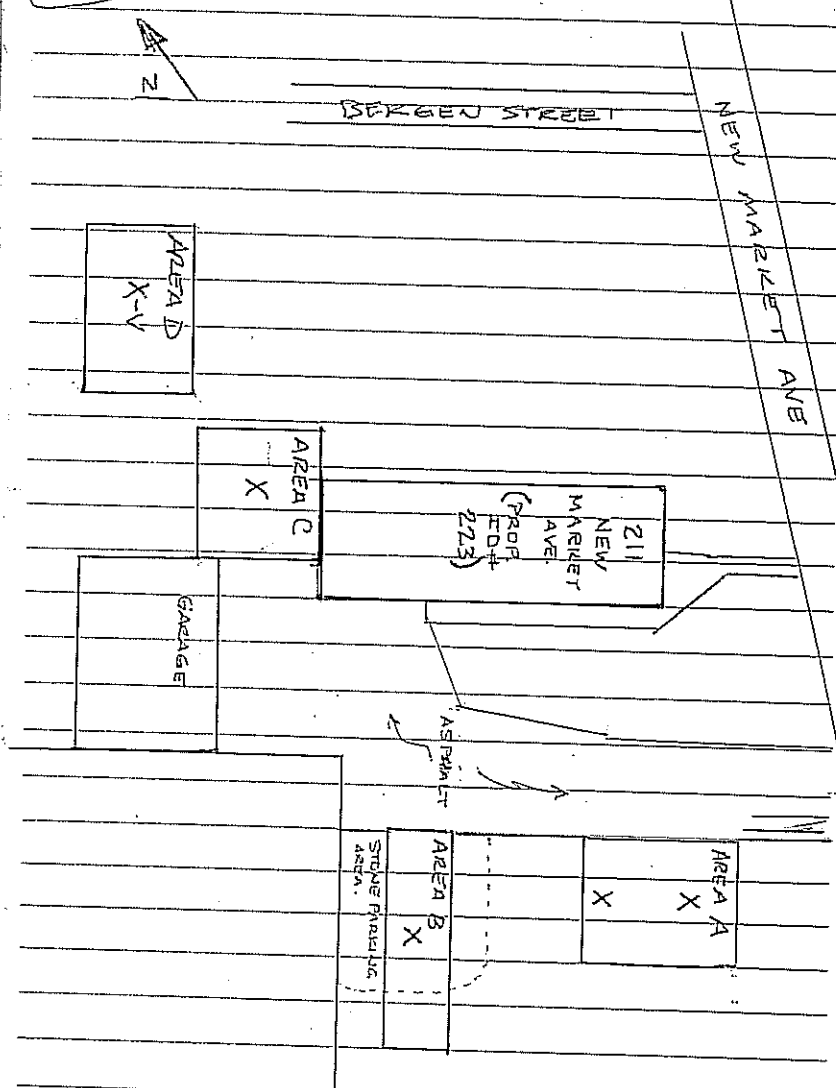
Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

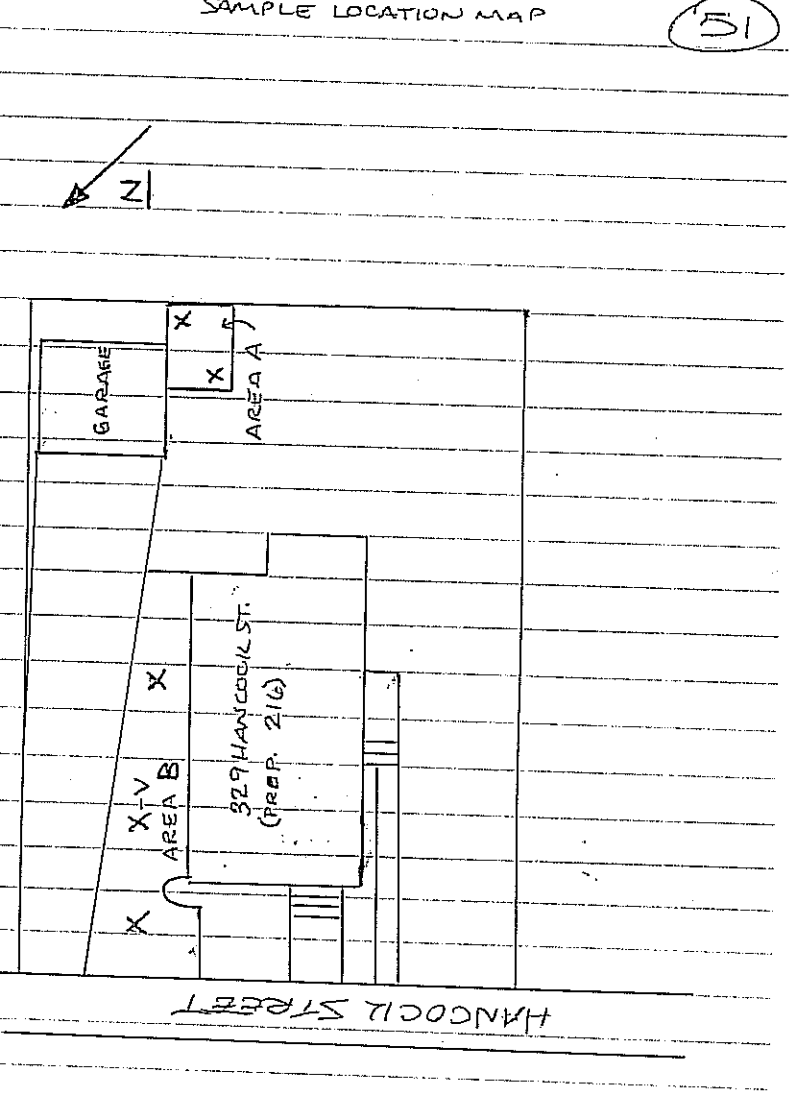
50

211 NEW MARKET AVE.
SAMPLE LOCATION MAP



329 HANCOCK ST.
SAMPLE LOCATION MAP

51



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/29/2013

TRANSMITTAL NO.: 01450A-323

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
34	Info Sample #055 - 329 Hancock Street	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #055 passed criteria for PCB's at 0.4 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
04-Jun-13 11:02

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M0764
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0764-01	CDE-OU1-329HAN-BY-055	Soil	15-May-13 11:45	16-May-13 10:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M0764

M0764

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 06/04/13
Fax Due: 05/23/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0764-01A	CDE-OU1-329HAN-BY-055	05/15/2013 11:45	05/16/2013	Soil	PMoist	/					A2
M0764-01A	CDE-OU1-329HAN-BY-055	05/15/2013 11:45	05/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	A2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

05/17/2013 16:51

Lab Client Rep: Agnes R Huntley

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-329HAN-B
Y-055

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0764 Mod. Ref No.: SDG No.: SM0764

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0764-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M0266F.D/E2M0266R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/16/2013

Extraction: (Type) SONC Date Extracted: 05/17/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	41	PJ
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0764 Mod. Ref No.: SDG No.: SM0764

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-71736	98	99	97	84			0
02	LCS-71736	95	97	88	83			0
03	CDE-OU1-329H AN-BY-055	79	83	77	77			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.05.07.A

Page 1 of 1

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 5/15/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms	X		
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 5/15/15

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: PARTLY CLOUDY. 55°F. INTERMITTENT RAIN.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE.

Planned Daily Activities: INFORMATION SOIL SAMPLE COLLECTED AT 329 HANCOCK ST. PROPERTY. AS PER EPA DIRECTION.

Description of Chemical Data Acquisition Work Performed: TOTAL PCB ANALYSIS, INCLUDING ADDITIONAL AROCLORS: 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLE SHIPPED OVERNIGHT VIA FEDEX TO MITKEM LABS, KINGSTOWN, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 5/15/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 5/15/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

[signature]

Date

5/15/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 5/15/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI [signature] 5/15/13
Name Signature Date

CQC Systems Manager _____
Name Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5 DAY
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: ~~G2789001~~ G2789024 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs 1262 AND 1268	TEMP.								
	329HAN-BY-055	5/15/13	1145	G	SO		1			X									
	TEMP. BLANK										X								

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ AND: ETSCHUDI@SEVENSON.COM

Relinquished	Received by	Date	Time
[signature]	FED EX	5/15/13	1700

Condition upon receipt: ☐ Good ☐ Ambient ☐ Cold

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311302120326

Ship Date: 15MAY13
ActWgt: 8.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 16 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 7997 6986 7384
0201

ZA NCOA

02852
RI-US
PVD

51BG1/9983/93AB

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 799769867384
Ship date: 05/15/2013
Estimated shipping charges: 23.09

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 8 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

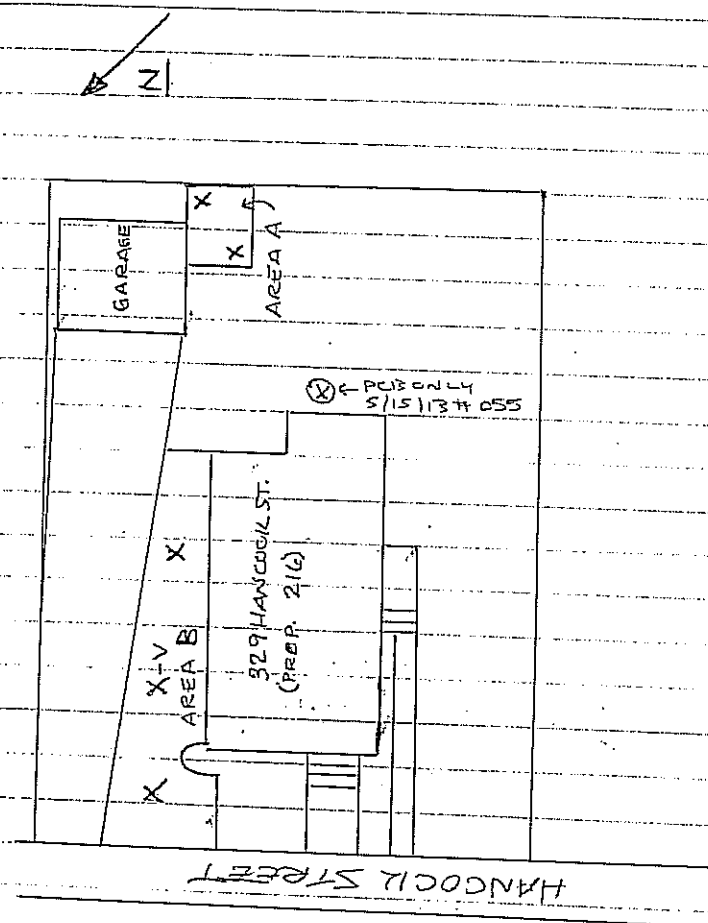
(56) PCB ONLY SAMPLING
5/15/13 329 HANCOCK ST.

1130 WEATHER MOSTLY CLOUDY 62°F.
E. TSCHUDI AND P. NOVAK MEET AT 329
HANCOCK STREET RESIDENCE TO MEET WITH
HOMEOWNER TO DISCUSS ADDITIONAL SAMPLING
FOR PCBs IN SOIL.
AND: P. NEJAND, USACE AND D. GARCIA,
USEPA. D. GARCIA AND P NEJAND
SELECT LOCATION IN BACKYARD TO
COLLECT SOIL SAMPLE. LABORER:
D. BRINK USING A SHOVEL DIGS TO A DEPTH
OF 24". E. TSCHUDI IS DIRECTED BY
D. GARCIA AND P. NEJAND TO COLLECT A
SINGLE SOIL SAMPLE FROM THIS LOCATION.
ONE - 8 OZ AMBER SAMPLE JAR IS FILLED
USING A STAINLESS STEEL SAMPLING SPOON.
1145 COLLECT CDE-001-329HAN-BY-055.
SAMPLE TO BE SHIPPED VIA FEDEX OVERNIGHT
TO MITKEM LABORATORIES. SEE P. 43 FOR
ADDRESS. TOTAL PCB ANALYSIS WITH
ADDITIONAL AROCLORS 1262 AND 1268.
1500 PROCESS SAMPLE FOR SHIPMENT TO LAB.
SEE P. 51 FOR SAMPLE LOCATION MAP.

5/15/13

329 HANCOCK ST.
SAMPLE LOCATION MAP

(51)



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 07/29/2013

TRANSMITTAL NO.: 01450A-324

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
35	Final Sample #059-#062 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #059 passed criteria for PCB's at 0.03 ppm
Sample #060 passed criteria for PCB's at 0.08 ppm
Sample #061 passed criteria for PCB's at 0.14 ppm
Sample #062 passed criteria for PCB's at 0.15 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
12-Jul-13 16:15

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1036
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1036-01	CDE-OU1-135TRE-39EW-059	Soil	24-Jun-13 09:00	25-Jun-13 10:28
M1036-02	CDE-OU1-135TRE-42NW-060	Soil	24-Jun-13 10:15	25-Jun-13 10:28
M1036-03	CDE-OU1-135TRE-42WW-061	Soil	24-Jun-13 10:30	25-Jun-13 10:28
M1036-04	CDE-OU1-135TRE-42SW-062	Soil	24-Jun-13 10:45	25-Jun-13 10:28

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M1036

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 07/12/13
Fax Due: 06/26/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M1036-01A	CDE-OU1-135TRE-39EW-059	06/24/2013 09:00	06/25/2013	Soil	PMoist	/					P3
M1036-01A	CDE-OU1-135TRE-39EW-059	06/24/2013 09:00	06/25/2013	Soil	SW8082_S	/ + AR1262,1268				Y	P3
M1036-02A	CDE-OU1-135TRE-42NW-060	06/24/2013 10:15	06/25/2013	Soil	PMoist	/					P3
M1036-02A	CDE-OU1-135TRE-42NW-060	06/24/2013 10:15	06/25/2013	Soil	SW8082_S	/ + AR1262,1268				Y	P3
M1036-03A	CDE-OU1-135TRE-42WW-061	06/24/2013 10:30	06/25/2013	Soil	PMoist	/					P3
M1036-03A	CDE-OU1-135TRE-42WW-061	06/24/2013 10:30	06/25/2013	Soil	SW8082_S	/ + AR1262,1268				Y	P3
M1036-04A	CDE-OU1-135TRE-42SW-062	06/24/2013 10:45	06/25/2013	Soil	PMoist	/					P3
M1036-04A	CDE-OU1-135TRE-42SW-062	06/24/2013 10:45	06/25/2013	Soil	SW8082_S	/ + AR1262,1268				Y	P3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

06/25/2013 12:55

Lab Client Rep: Agnes R Huntley

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-39EW-059

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1036 Mod. Ref No.: SDG No.: SM1036

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1036-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M1168F.D/E2M1168R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 06/25/2013

Extraction: (Type) SONC Date Extracted: 06/25/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-4
2NW-060

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1036 Mod. Ref No.: SDG No.: SM1036

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1036-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M1169F.D/E2M1169R.D

% Moisture: 17 Decanted: (Y/N) N Date Received: 06/25/2013

Extraction: (Type) SONC Date Extracted: 06/25/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	85	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-4
2WW-061

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1036 Mod. Ref No.: SDG No.: SM1036

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1036-03A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M1170F.D/E2M1170R.D

% Moisture: 17 Decanted: (Y/N) N Date Received: 06/25/2013

Extraction: (Type) SONC Date Extracted: 06/25/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-4
2SW-062

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1036 Mod. Ref No.: SDG No.: SM1036

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1036-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M1171F.D/E2M1171R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 06/25/2013

Extraction: (Type) SONC Date Extracted: 06/25/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/26/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	150	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1036 Mod. Ref No.: SDG No.: SM1036

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72433	86	87	91	82			0
02	LCS-72433	87	88	90	85			0
03	CDE-OU1-135T RE-39EW-059	70	71	79	72			0
04	CDE-OU1-135T RE-42NW-060	64	65	79	69			0
05	CDE-OU1-135T RE-42WW-061	82	82	92	77			0
06	CDE-OU1-135T RE-42SW-062	81	80	91	77			0

QC LIMITS

TCX = Tetrachloro-m-xylene (34-147)

DCB = Decachlorobiphenyl (60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.06.03.A

Page 1 of 1

SW846

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1036 Mod. Ref No.: SDG No.: SM1036

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 06/26/2013 06/26/2013

Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.473 DCB: 10.049

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605F2	E2M1159R.D	6/26/2013	18:59	3.472	10.049
29	AR16603FA	E2M1162R.D	6/26/2013	19:58	3.473	10.050
30	AR12543FA	E2M1165R.D	6/26/2013	20:58	3.473	10.049
31	MB-72433	E2M1166R.D	6/26/2013	21:18	3.472	10.048
32	LCS-72433	E2M1167R.D	6/26/2013	21:37	3.472	10.048
33	CDE-OU1-135T RE-39EW-059	E2M1168R.D	6/26/2013	21:57	3.472	10.048
34	CDE-OU1-135T RE-42NW-060	E2M1169R.D	6/26/2013	22:17	3.474	10.049
35	CDE-OU1-135T RE-42WW-061	E2M1170R.D	6/26/2013	22:36	3.474	10.049
36	CDE-OU1-135T RE-42SW-062	E2M1171R.D	6/26/2013	22:56	3.474	10.048
37	AR16603FB	E2M1177R.D	6/27/2013	0:54	3.477	10.053
38	AR12543FB	E2M1180R.D	6/27/2013	1:54	3.475	10.052

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/24/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

6/24/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 6/24/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLEAR SKIES, WARM, HUMID. 78°F @ 0800. WIND 3-5 MPH - WNW.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D, PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT PCB ONLY SOIL SAMPLES WITHIN 135 TREMONT AVE. PROPERTY.

Description of Chemical Data Acquisition Work Performed: ANALYSIS REQUESTED: TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED VIA FEDEX OVERNIGHT TO MITKEM LABS, NORTH KINGSTON, RI LOCATION.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NOT AT THIS TIME

Non-conformance Problems: NONE

Corrective Actions (including approvals): NA

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 6/25/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/25/13 For 6/24/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date 6/25/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/24/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		6/24/13
CQC Systems Manager			6-24-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Analysis Requested (see below)

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (GDE-DUF)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.
	135TRE-39EW-059	6/24/13	0900	G	SO		1			X	
	135TRE-42NW-060	6/24/13	1015	G	SO		1			X	
	135TRE-42WW-061	6/24/13	1030	G	SO		1			X	
	135TRE-42SW-062	6/24/13	1045	G	SO		1			X	
	TEMP BLANK										X

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished by: Eric Tschudi
Received by: FED EX
Date: 6/24/13 Time: 1700

Cond. of Rec'd: ☐ Good ☐ Adj. Cont. ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J131113021203:6

Ship Date: 24JUN13
ActWgt: 18.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

TUE - 25 JUN 10:30A
PRIORITY OVERNIGHT

TRK# 7960 7679 7403
0201

ED NCOA

02852
RI-US
PVD

518G1/D777/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796076797403
Ship date: 06/24/2013
Estimated shipping charges: 33.35

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 18 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(62) 135 TREMONT AVE. (CHURCH PROP.)
PCB-ONLY SOIL SAMPLING.

6/24/13 @ 0800, E. TSCHUDI ARRIVES TO 135 TREMONT AVE PROPERTY TO COLLECT PCB SOIL SAMPLES. SET UP TO COLLECT SAMPLES AT LOCATIONS BETWEEN PRIMARY AND SECONDARY EXCAVATIONS. WILL COLLECT SAMPLES AT EAST SIDEWALL OF GRID 39 AT 11" BLS, GRID 42 NORTH WALL, WEST-WALL, AND SOUTH WALL AT 6" BLS. * SEE MAP P.58.

WEATHER: CLEAR SKIES, 78°F, 73% HUMID. 3-5 MPH WIND - WNW.

0900 COLLECT. CDE-OU1-135TRE-39EW-059, USING STAINLESS STEEL HAND AUGER AT A DEPTH OF 11" BLS. SOIL COLLECTED FROM BUCKET TO 4 oz AMBER SOIL JAR. SAMPLE TO BE ANALYZED FOR PCBs ONLY - TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268.

1000 SETUP AT GRID 42 FOR 3-SOIL SAMPLES AT 6" BLS.

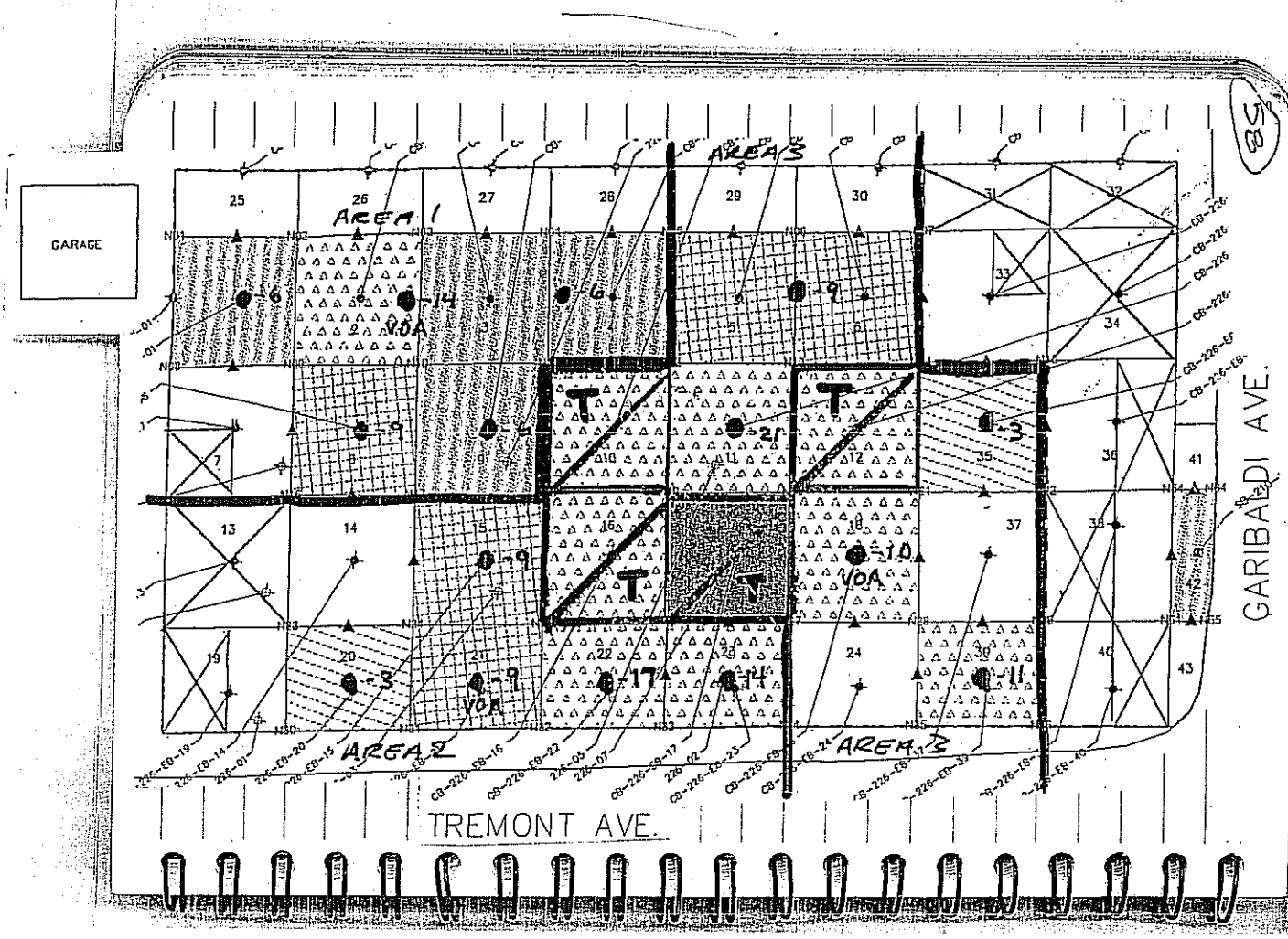
1015 COLLECT CDE-OU1-135TRE-42NW-060

1030 COLLECT CDE-OU1-135TRE-42WW-061

1045 COLLECT CDE-OU1-135TRE-42SW-062

SAMPLES PLACED ON ICE IN COOLER - PACKED TO BE SHIPPED TO: MITKEM LABS - 646 CAMP AVE.
NORTH KINGSTON, RI 02852.
PH. 401 7323400. SHIPPED OVERNIGHT FEDEX, FOR 24 HOUR TAT.

[signature]. 6/24/13


GARAGE
AREA 1
AREA 2
AREA 3
AREA 4
VOA
TREMONT AVE.
GARIBALDI AVE.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/03/2013

TRANSMITTAL NO.: 01450A-352

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
36	Final Sample #063-#066 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS

Sample #063 passed criteria for PCB's at 0.21 ppm
Sample #064 passed criteria for PCB's at 0.23 ppm
Sample #065 passed criteria for PCB's at 0.62 ppm
Sample #066 passed criteria for PCB's at 0.23 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
29-Jul-13 16:33

SPECTRUM ANALYTICAL, INC.
Featuring
HANNIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1128
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1128-01	CDE-OU1-135TRE-01NW-063	Soil	10-Jul-13 10:20	11-Jul-13 10:20
M1128-02	CDE-OU1-135TRE-01SW-064	Soil	10-Jul-13 10:30	11-Jul-13 10:20
M1128-03	CDE-OU1-135TRE-02NW-065	Soil	10-Jul-13 10:40	11-Jul-13 10:20
M1128-04	CDE-OU1-135TRE-02FL-066	Soil	10-Jul-13 10:50	11-Jul-13 10:20

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LA100301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY TNI

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M1128

M1128

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 07/30/13
Fax Due: 07/12/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M1128-01A	CDE-OU1-135TRE-01NW-063	07/10/2013 10:20	07/11/2013	Soil	PMoist	/					K2
M1128-01A	CDE-OU1-135TRE-01NW-063	07/10/2013 10:20	07/11/2013	Soil	SW8082_S	/ + AR1262,1268				Y	K2
M1128-02A	CDE-OU1-135TRE-01SW-064	07/10/2013 10:30	07/11/2013	Soil	PMoist	/					K2
M1128-02A	CDE-OU1-135TRE-01SW-064	07/10/2013 10:30	07/11/2013	Soil	SW8082_S	/ + AR1262,1268				Y	K2
M1128-03A	CDE-OU1-135TRE-02NW-065	07/10/2013 10:40	07/11/2013	Soil	PMoist	/					K2
M1128-03A	CDE-OU1-135TRE-02NW-065	07/10/2013 10:40	07/11/2013	Soil	SW8082_S	/ + AR1262,1268				Y	K2
M1128-04A	CDE-OU1-135TRE-02FL-066	07/10/2013 10:50	07/11/2013	Soil	PMoist	/					K2
M1128-04A	CDE-OU1-135TRE-02FL-066	07/10/2013 10:50	07/11/2013	Soil	SW8082_S	/ + AR1262,1268				Y	K2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

07/12/2013 08:29

Lab Client Rep: Agnes R Huntley

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-01NW-063

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1128 Mod. Ref No.: SDG No.: SM1128

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1128-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M1459F.D/E2M1459R.D

% Moisture: 9.8 Decanted: (Y/N) N Date Received: 07/11/2013

Extraction: (Type) SONC Date Extracted: 07/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/11/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	210	
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-01SW-064

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1128 Mod. Ref No.: SDG No.: SM1128

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1128-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1460F.D/E2M1460R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 07/11/2013

Extraction: (Type) SONC Date Extracted: 07/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/11/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	230	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-02NW-065

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1128 Mod. Ref No.: SDG No.: SM1128

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1128-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1461F.D/E2M1461R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 07/11/2013

Extraction: (Type) SONC Date Extracted: 07/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/11/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	62	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-02FL-066

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1128 Mod. Ref No.: SDG No.: SM1128

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1128-04A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M1462F.D/E2M1462R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 07/11/2013

Extraction: (Type) SONC Date Extracted: 07/11/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/11/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ~~ug~~/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	23	J
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1128 Mod. Ref No.: SDG No.: SM1128

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72680	91	92	83	84			0
02	LCS-72680	92	92	90	85			0
03	CDE-OU1-135T RE-01NW-063	75	73	76	72			0
04	CDE-OU1-135T RE-01SW-064	68	68	72	65			0
05	CDE-OU1-135T RE-02NW-065	67	67	65	67			0
06	CDE-OU1-135T RE-02FL-066	71	71	68	71			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

sum13.07.22.A

Page 1 of 1

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/10/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY, 87°F. 76% HUMIDITY, WIND SW - 5 MPH.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE IMPLEMENTED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION AT 135 TREMONT AVENUE PROPERTY. SOIL SAMPLING OF GRIDS 1 + 2 OF 135 TREMONT PROPERTY.

Description of Chemical Data Acquisition Work Performed: ANALYSIS REQUESTED FOR SOIL SAMPLES COLLECTED: TOTAL PCB'S PLUS ADDITIONAL AROCLORS 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT VIA FEDEX TO MICKEAL LABS, 646 CAMP AVENUE, NORTH KINGSTON, RI 02852. 401 732 3400.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/10/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/10/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/10/13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/10/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank for PCB Samples.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/10/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/10/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

Sevenson Project Manager_____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/10/13
CQC Systems Manager	[illegible]	[illegible]	7-10-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Containers / Analyses

Lab Id:	Sample Id: CDE-OUI-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.
	135TRE-01NW-063	7/10/13	1020	G	SO		1			X	
	135TRE-01SW-064	7/10/13	1030	G	SO		1			X	
	135TRE-02NW-065	7/10/13	1040	G	SO		1			X	
	135TRE-02FL-066	7/10/13	1050	G	SO		1			X	
	TEMP.										X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished by	Received by	Date	Time
[signature]	FED EX	7/10/13	1600

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311130212032G

Ship Date: 10JUL13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 11 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7961 9598 6270
0201

ED NCOA

02852
RI-US
PVD

518G1/AA04/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796195986270
Ship date: 07/10/2013
Estimated shipping charges: 29.52

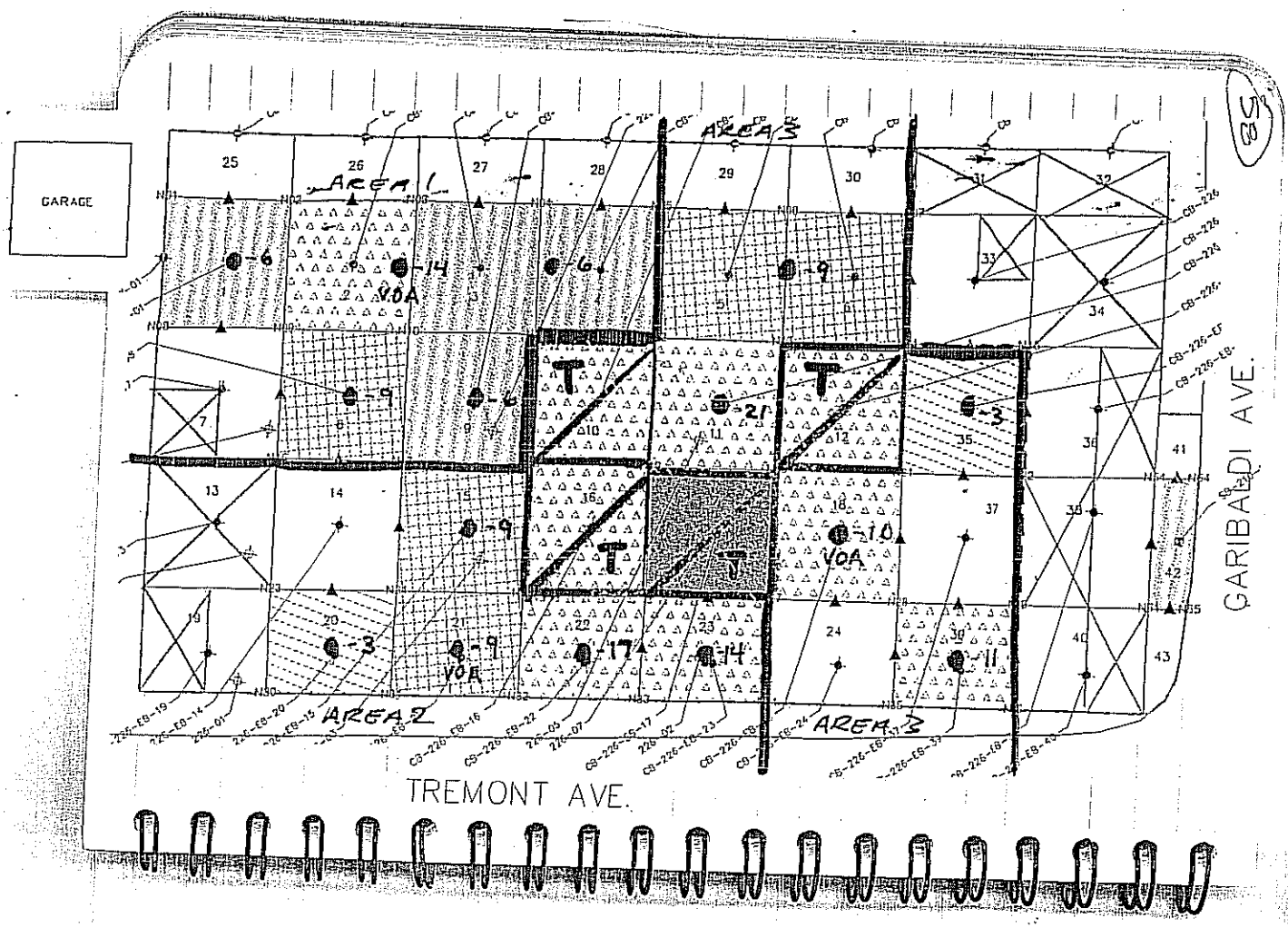
Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


GARAGE
AREA 1
AREA 2
AREA 3
AREA 5
VOA
TREMONT AVE.
GARIBALDI AVE.

135 TREMONT AVENUE
(CHURCH LOT)
PCB ONLY - CONFIRMATION 7/10/13

WEATHER: CLOUDY - 85°F. 67% HUM. 5MPH SW.

1000 E. TSCHUDI ARRIVE TO 135 TREMONT AVE TO COLLECT CONFIRMATION SOIL SAMPLES FOR PCB ANALYSIS, PLUS ADDITIONAL AROCLORS 1262 AND 1268.

GRID 01 IS ~~NEARLY~~ COMPLETE - EXCAVATION - WISE.

GRID 02 IS ~~NE~~ COMPLETE. COLLECT THE FOLLOWING SOIL SAMPLES AT THE FOLLOWING TIMES. SEE P. 58 FOR LOCATION MAP, P. 62 FOR LAB INFO, AND SAMPLING INFO.

TIME	SAMPLE CODE	ANALYSIS	DEPTH - BGS
1020	CDE-001-135TRE-01NW-063	PCBs	3-6"
1030	CDE-001-135TRE-01SW-064	PCBs	3-6"
1040	CDE-001-135TRE-02NW-065	PCBs	14"
1050	CDE-001-135TRE-02FL-066	PCBs	14"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/03/2013

TRANSMITTAL NO.: 01450A-353

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
37	Final Sample #071-#073 & 077-135 Tremont	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #071 passed criteria for PCB's at 0.80 ppm
Sample #072 passed criteria for PCB's at 0.04 ppm
Sample #073 passed criteria for PCB's at 0.12 ppm
Sample #077 passed criteria for PCB's at 0.03 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
01-Aug-13 10:54

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: M1155
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1155-01	CDE-OU1-135TRE-39FL-071	Soil	12-Jul-13 11:00	13-Jul-13 11:05
M1155-02	CDE-OU1-135TRE-39WW-072	Soil	12-Jul-13 11:05	13-Jul-13 11:05
M1155-03	CDE-OU1-135TRE-39E-073	Soil	12-Jul-13 11:10	13-Jul-13 11:05
~~M1155-04~~	~~CDE-OU1-135TRE-FB1-074~~	~~Soil~~	~~13-Jul-13 11:15~~	~~13-Jul-13 11:05~~
~~M1155-05~~	~~CDE-OU1-135TRE-33E-075~~	~~Soil~~	~~12-Jul-13 11:20~~	~~13-Jul-13 11:05~~
~~M1155-06~~	~~CDE-OU1-135TRE-FB2-076~~	~~Soil~~	~~12-Jul-13 11:25~~	~~13-Jul-13 11:05~~
M1155-07	CDE-OU1-135TRE-35NW-077	Soil	12-Jul-13 11:30	13-Jul-13 11:05
~~M1155-08~~	~~CDE-OU1-135TRE-35FW-078~~	~~Soil~~	~~12-Jul-13 11:35~~	~~13-Jul-13 11:05~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-3
9FL-071

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M1601F.D/E2M1601R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	800	
11096-82-5	Aroclor-1260	210	U
37324-23-5	Aroclor-1262	210	U
11100-14-4	Aroclor-1268	210	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-3
9WW-072

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1584F.D/E2M1584R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-3
9E-073

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1585F.D/E2M1585R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	120	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-3
5NW-077

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-07A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M1589F.D/E2M1589R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72714	84	84	90	81			0
02	LCS-72714	84	87	89	83			0
03	CDE-OU1-135T RE-39WW-072	73	76	71	69			0
04	CDE-OU1-135T RE-39E-073	79	82	76	73			0
05	CDE-OU1-135T RE-35NW-077	70	73	70	67			0
06	CDE-OU1-135T RE-39FL-071	71	72	89	80			0
07	CDE-OU1-135T RE-18I-074	84	85	138 D	96			1
08	CDE-OU1-135T RE-23I-075	91	94	146 D	110			1
09	CDE-OU1-135T RE-12FL-076	75	81	130 D	100			1
10	CDE-OU1-135T RE-35EW-078	77	83	726 D	110			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

Page 1 of 1

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/12/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY/OVERCAST ~~78-82%~~ 78-82°F. 50% WIND E 10-15 mph

Subcontractors Present Onsite: TRUCKING CO. LOAD OUT OF EXCAVATED MATERIAL.

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE AND LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION WITHIN GRIDS 6, 10, 12, 17 18, 23. SAMPLING WITHIN GRIDS 12, 18, 23, 35 AND 39. ALL GRIDS WITHIN EMPTY LOT AT 135 FREMONT AVENUE.

Description of Chemical Data Acquisition Work Performed: TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT (SATURDAY DELIVERY) TO MIERKEM LABS NORTH KINGSTON, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: 1 - INFORMATIONAL SAMPLES WITHIN GRIDS 18 AND 23.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/12/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/12/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/12/13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/12/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/12/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/12/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing-tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

_____

_____

_____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/12/13
CQC Systems Manager	[illegible]	[illegible]	7-12-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List of Preservative code below

Containers | Analyses

Lab Id:	Sample Id: CDE-OU1-	Date: 2013	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-39FL-071	7/12	1100	G	SO		1			X								
	135TRE-39WW-072	7/12	1105	G	SO		1			X								
	135TRE-39E-073	7/12	1110	G	SO		1			X								
	135TRE-18I-074	7/12	1115	G	SO		1			X								
	135TRE-23I-075	7/12	1120	G	SO		1			X								
	135TRE-12FL-076	7/12	1125	G	SO		1			X								
	135TRE-35NW-077	7/12	1130	G	SO		1			X								
	135TRE-35EW-078	7/12	1135	G	SO		1			X								
	TEMP										X							

Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished by	Received by	Date	Time
[signature]	FED EX	7/12/13	1600

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J131113021203 26

Ship Date: 12JUL13
ActWgt: 20.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7962 1788 1470
0201

X0 NCOA

02852
RI-US
PVD

518G1/AA04/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796217881470
Ship date: 07/12/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services: Saturday delivery
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

135 TREMONT AVENUE
(CHURCH LOT)
PCB ONLY - CONFIRMATION 7/10/13

WEATHER: CLOUDY - 85°F. 67% HUM. 5MPH SW.

1000 E. TSCHUDI ARRIVE TO 135 TREMONT AVE TO COLLECT CONFIRMATION SOIL SAMPLES FOR PCB ANALYSIS, PLUS ADDITIONAL AROCLORS 1262 AND 1268.

GRID 01 IS NEARLY COMPLETE - EXCAVATION - WISE.

GRID 02 IS NE COMPLETE. COLLECT THE FOLLOWING SOIL SAMPLES AT THE FOLLOWING TIMES. SEE P. 58 FOR LOCATION MAP, P. 62 FOR LAB INFO, AND SAMPLING INFO.

TIME	SAMPLE CODE	ANALYSIS	DEPTH - BGS
1020	CDE-001-135TRE-01NW-063	PCBs	3-6"
1030	CDE-001-135TRE-01SW-064	PCBs	3-6"
1040	CDE-001-135TRE-02NW-065	PCBs	14"
1050	CDE-001-135TRE-02FL-066	PCBs	14"

7/11/13 CONTINUATION OF PCB SAMPLING, (CONFIRMATION)

1015	CDE-001-135TRE-39NW-067	PCBs	~~3~~ 11"
1040	CDE-001-135TRE-35SW-068	PCB	~~10~~ 3"
1030	CDE-001-135TRE-18EW-069	PCB	~~11~~ 10"
1020	CDE-001-135TRE-38NW-070	PCB	6"

SEE P. 58 FOR SAMPLE MAP, P. 62 FOR LAB INFO.

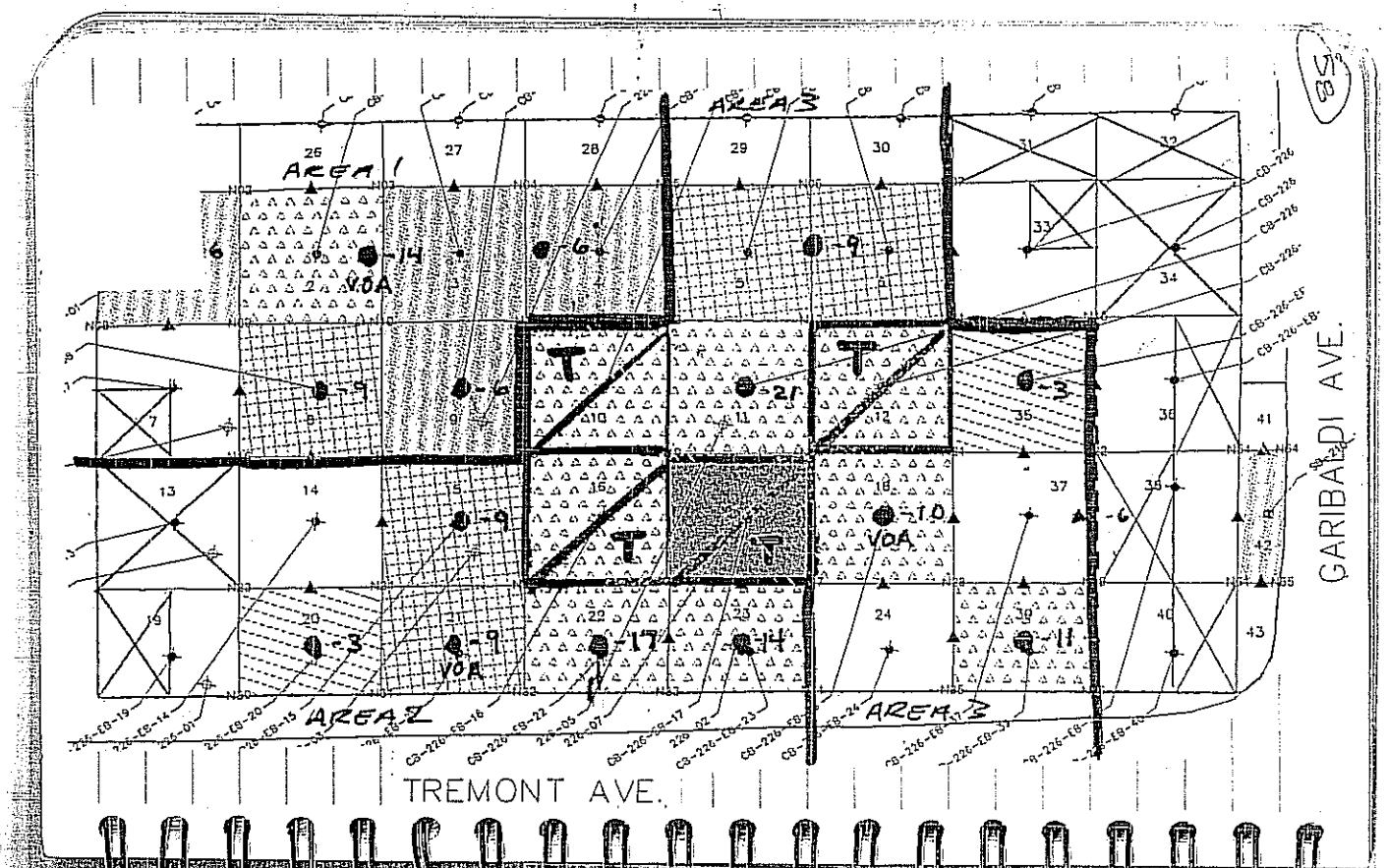
7/12/13 - CONTINUE SAMPLING. OVERCAST 80°F.

1100	CDE-001-135TRE-39FL-071	~~22~~ 22"	
1105	CDE-001-135TRE-39NW-072	11"	
1110	CDE-001-135TRE-39EW-073	11"	
1115	CDE-001-135TRE-18FL-074 (EW-CAPACITOR)	20"	(18I) INFO
1120	CDE-001-135TRE-~~18SW~~-075 (23EW CAPAC)	10"	(23I) INFO
1125	CDE-001-135TRE-12FL-076	22"	
1130	CDE-001-135TRE-35NW-077	9"	
1135	CDE-001-135TRE-35EW-078	3"	

~~39SW-079~~ ~~11"~~

INFO samples contain material previously identified with capacitor parts.

"Rite in the Rain"


AREA 1
AREA 2
AREA 3
AREA 4
TREMONT AVE.
GARIBALDI AVE.
VOA

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-355

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
38	Info Sample #074-076 & 078 -135 Tremont	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #074 failed criteria for PCB's at 2.00 ppm
Sample #075 failed criteria for PCB's at 1.70 ppm
Sample #076 failed criteria for PCB's at 8.30 ppm
Sample #078 failed criteria for PCB's at 13.00 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
01-Aug-13 10:54

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1155
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~M1155-01~~	~~CDE-OU1-135TRE-39FE-071~~	~~Soil~~	~~12-Jul-13 11:00~~	~~13-Jul-13 11:05~~
~~M1155-02~~	~~CDE-OU1-135TRE-39WW-072~~	~~Soil~~	~~12-Jul-13 11:05~~	~~13-Jul-13 11:05~~
~~M1155-03~~	~~CDE-OU1-135TRE-39E-073~~	~~Soil~~	~~12-Jul-13 11:10~~	~~13-Jul-13 11:05~~
M1155-04	CDE-OU1-135TRE-18I-074	Soil	12-Jul-13 11:15	13-Jul-13 11:05
M1155-05	CDE-OU1-135TRE-23I-075	Soil	12-Jul-13 11:20	13-Jul-13 11:05
M1155-06	CDE-OU1-135TRE-12FL-076	Soil	12-Jul-13 11:25	13-Jul-13 11:05
~~M1155-07~~	~~CDE-OU1-135TRE-35NW-077~~	~~Soil~~	~~12-Jul-13 11:30~~	~~13-Jul-13 11:05~~
M1155-08	CDE-OU1-135TRE-35EW-078	Soil	12-Jul-13 11:35	13-Jul-13 11:05

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
8I-074

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2M1602F.D/E2M1602R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	410	U
11104-28-2	Aroclor-1221	410	U
11141-16-5	Aroclor-1232	410	U
53469-21-9	Aroclor-1242	410	U
12672-29-6	Aroclor-1248	410	U
11097-69-1	Aroclor-1254	2000	P
11096-82-5	Aroclor-1260	410	U
37324-23-5	Aroclor-1262	410	U
11100-14-4	Aroclor-1268	410	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
3I-075

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1603F.D/E2M1603R.D

% Moisture: 30 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	470	U
11104-28-2	Aroclor-1221	470	U
11141-16-5	Aroclor-1232	470	U
53469-21-9	Aroclor-1242	470	U
12672-29-6	Aroclor-1248	470	U
11097-69-1	Aroclor-1254	1700	
11096-82-5	Aroclor-1260	470	U
37324-23-5	Aroclor-1262	470	U
11100-14-4	Aroclor-1268	470	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
2FL-076

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-06A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M1604F.D/E2M1604R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 50.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1900	U
11104-28-2	Aroclor-1221	1900	U
11141-16-5	Aroclor-1232	1900	U
53469-21-9	Aroclor-1242	1900	U
12672-29-6	Aroclor-1248	1900	U
11097-69-1	Aroclor-1254	8300	
11096-82-5	Aroclor-1260	1900	U
37324-23-5	Aroclor-1262	1900	U
11100-14-4	Aroclor-1268	1900	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-3
5EW-078

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1155-08A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M1605F.D/E2M1605R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 07/13/2013

Extraction: (Type) SONC Date Extracted: 07/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 100.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	3800	U
11104-28-2	Aroclor-1221	3800	U
11141-16-5	Aroclor-1232	3800	U
53469-21-9	Aroclor-1242	3800	U
12672-29-6	Aroclor-1248	3800	U
11097-69-1	Aroclor-1254	13000	
11096-82-5	Aroclor-1260	3800	U
37324-23-5	Aroclor-1262	3800	U
11100-14-4	Aroclor-1268	3800	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1155 Mod. Ref No.: SDG No.: SM1155

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72714	84	84	90	81			0
02	LCS-72714	84	87	89	83			0
03	CDE-OU1-135T RE-39WW-072	73	76	71	69			0
04	CDE-OU1-135T RE-39E-073	79	82	76	73			0
05	CDE-OU1-135T RE-35NW-077	70	73	70	67			0
06	CDE-OU1-135T RE-39FL-071	71	72	89	80			0
07	CDE-OU1-135T RE-18I-074	84	85	138 D	96			1
08	CDE-OU1-135T RE-23I-075	91	94	146 D	110			1
09	CDE-OU1-135T RE-12FL-076	75	81	130 D	100			1
10	CDE-OU1-135T RE-35EW-078	77	83	726 D	110			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

Page 1 of 1 SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/12/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: CLOUDY/OVERCAST ~~78 89%~~ 78-82°F. 50% WIND E 10-15 MPH

Subcontractors Present Onsite: TRUCKING CO. LOAD OUT OF EXCAVATED MATERIAL.

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE AND LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION WITHIN GRIDS 6, 10, 12, 17 18, 23. SAMPLING WITHIN GRIDS 12, 18, 23, 35 AND 39. ALL GRIDS WITHIN EMPTY LOT AT 135 FREMONT AVENUE.

Description of Chemical Data Acquisition Work Performed: TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT (SATURDAY DELIVERY) TO MITKEM LABS NORTH KINGSTON, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: 1 - INFORMATIONAL SAMPLES WITHIN GRIDS 18 AND 23.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/12/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/12/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/12/13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/12/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/12/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/12/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		7/12/13
CQC Systems Manager			7-12-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Containers | Analyses | Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: CDE-OU1-	Date: 2013	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.
	135TRE-39FL-071	7/12	1100	G	SO		1			X	
	135TRE-39WW-072	7/12	1105	G	SO		1			X	
	135TRE-39E-073	7/12	1110	G	SO		1			X	
	135TRE-18I-074	7/12	1115	G	SO		1			X	
	135TRE-23I-075	7/12	1120	G	SO		1			X	
	135TRE-12FL-076	7/12	1125	G	SO		1			X	
	135TRE-35NW-077	7/12	1130	G	SO		1			X	
	135TRE-35EW-078	7/12	1135	G	SO		1			X	
	TEMP										X

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished	Received	Date	Time
[signature]	FED EX	7/12/13	1600

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13111302120326

Ship Date: 12JUL13
ActWgt: 20.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 7962 1788 1470

X0 NCOA

02852
RI-US
PVD

51BG1/AA04/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796217881470
Ship date: 07/12/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services: Saturday delivery
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

135 TREMONT AVENUE
(CHURCH LOT)
PCB ONLY - CONFIRMATION 7/10/13

WEATHER: CLOUDY - 85°F. 67% HUM. 5MPH SW.

1000 E. TSCHUDI ARRIVE TO 135 TREMONT AVE TO COLLECT CONFIRMATION SOIL SAMPLES FOR PCB ANALYSIS, PLUS ADDITIONAL AROCLORS 1262 AND 1268.

GRID 01 IS NEARLY COMPLETE - EXCAVATION - WISE.

GRID 02 IS NE COMPLETE. COLLECT THE FOLLOWING SOIL SAMPLES AT THE FOLLOWING TIMES. SEE P. 58 FOR LOCATION MAP, P. 62 FOR LAB INFO; AND SAMPLING INFO.

TIME	SAMPLE CODE	ANALYSIS	DEPTH - BGS
1020	CDE-001-135TRE-01NW-063	PCBs	3-6"
1030	CDE-001-135TRE-01SW-064	PCBs	3-6"
1040	CDE-001-135TRE-02NW-065	PCBs	14"
1050	CDE-001-135TRE-02FL-066	PCBs	14"

7/11/13 CONTINUATION OF PCB SAMPLING, (CONFIRMATION)

1015	CDE-001-135TRE- 39NW-067	PCBs	~~3~~ 11"
1040	CDE-001-135TRE- 35SW-068	PCB	~~10~~ 3"
1030	CDE-001-135TRE- 18EW-069	PCB	~~11~~ 10"
1020	CDE-001-135TRE- 38WW-070	PCB	6"

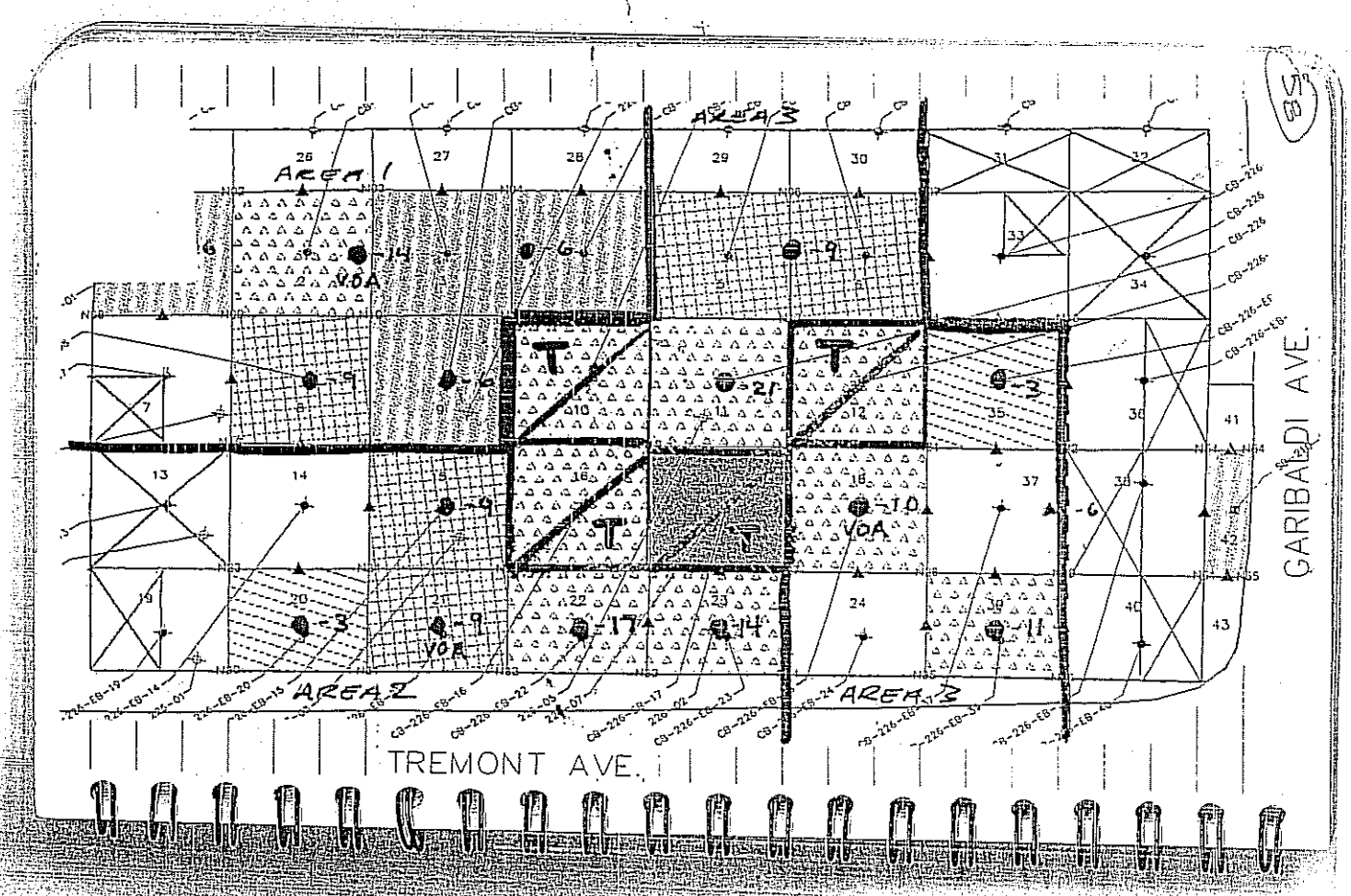
SEE P. 58 FOR SAMPLE MAP, P. 62 FOR LAB INFO.

7/12/13 - CONTINUE SAMPLING. OVERCAST 80°F.

1100	CDE-001-135TRE - 39FL-071		~~11~~ 22"	
1105	CDE-001-135TRE - 39NW-072		11"	
1110	CDE-001-135TRE 39EW-073		11"	
1115	CDE-001-135TRE - 18FL-074	(EW-CAPACITOR)	20"	(18I) INFO
1120	CDE-001-135TRE - ~~18~~ SW-075	(23EW CAPAC)	10"	(23I) INFO
1125	CDE-001-135TRE - 12FL-076		22"	
1130	CDE-001-135TRE - 35NW-077		9"	
1135	CDE-001-135TRE - 35EW-078		3"	
	~~39SW-079~~		~~11~~	

INFO samples contain material previously identified with capacitor parts.

"Rain in the Rain"


AREA 1
AREA 2
AREA 3
AREA 4
TREMONT AVE.
GARIBALDI AVE.
VOA

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-356

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
39	Final Sample #079 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
05-Aug-13 13:04

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: M1192
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1192-01	CDE-OU1-135TRE-35FL-079	Soil	17-Jul-13 11:05	18-Jul-13 10:20
~~M1192-02~~	~~CDE-OU1-135TRE-10FL-080~~	~~Soil~~	~~17-Jul-13 11:10~~	~~18-Jul-13 10:20~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-3
5FL-079

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1192 Mod. Ref No.: SDG No.: SM1192

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1192-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M1661F.D/E2M1661R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 07/18/2013

Extraction: (Type) SONC Date Extracted: 07/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/18/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/17/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY - HOT 95-97°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D and MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION OF CONTAMINATED SOIL FROM WITHIN GRID SYSTEM AT 135 TREMONT.

Description of Chemical Data Acquisition Work Performed: TOTAL PCB ANALYSIS TO INCLUDE ADDITIONAL AROCLORS 1262, 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: MITKEM LABS, OVERNIGHT FED EX.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NA

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

7/17/13

Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/17/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly; accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/17/13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 9/17/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

9/17/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/17/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☑	☐	☐	Has a Preparatory Phase meeting been conducted?	
☑	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☑	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI [signature] 7/17/13
Name Signature Date

CQC Systems Manager _____
Name Signature Date

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13111302120326

Ship Date: 17JUL13
ActWgt: 20.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 18 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7962 5088 4960

ED NCOA

02852
RI-US
PVD

518G1/AA04/03AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796250884960
Ship date: 07/17/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

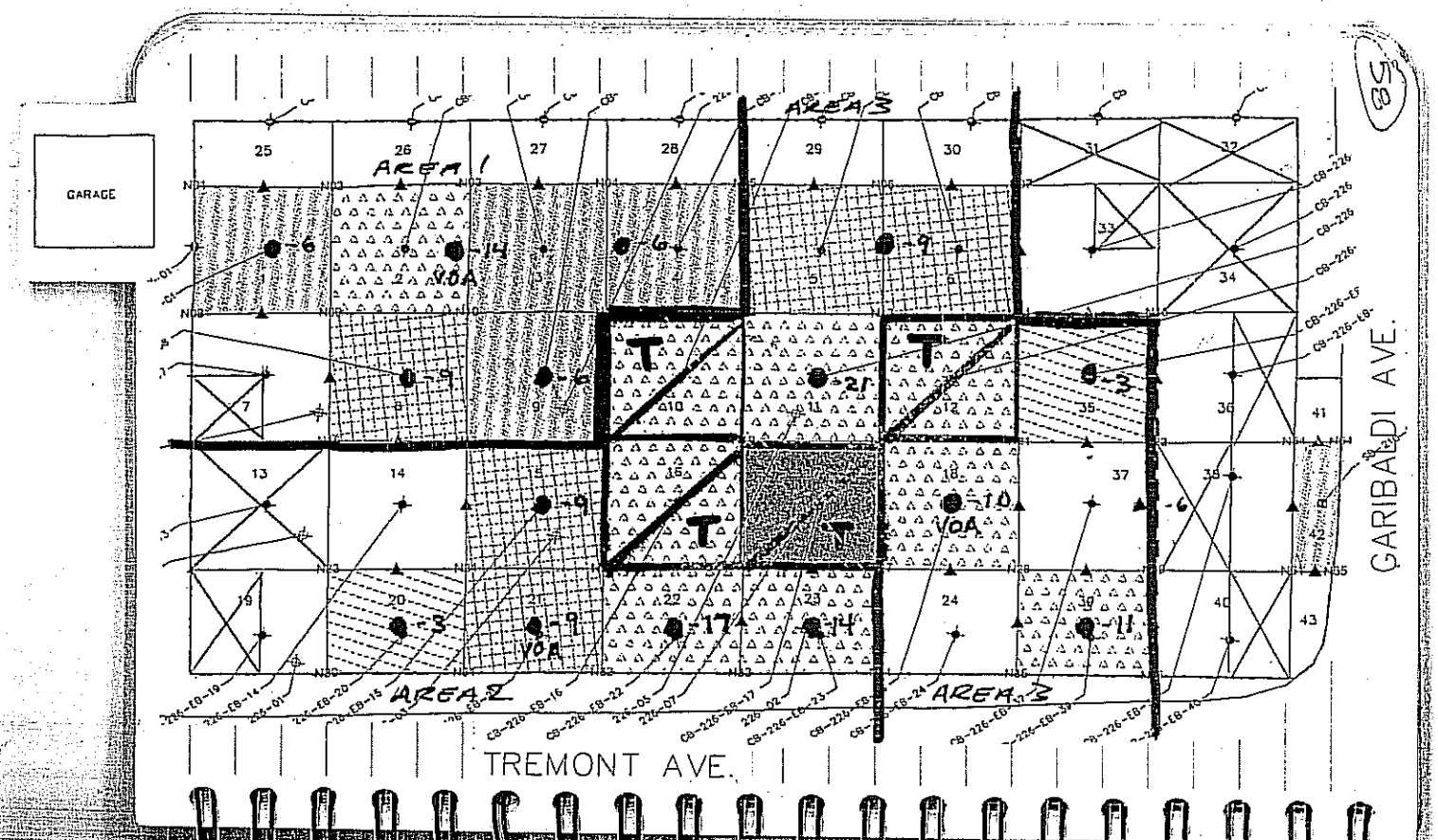
State specific reporting standards:

Lab Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-35FL-079	7/17/13	1105	G	SO		1			X								
	135TRE-10FL-080	7/17/13	1110	G	SO		1			X								
	TEMP										X							

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished	Received by	Date	Time
[signature]	FED EX	1600	

Condition upon receipt: ☐ Good ☐ Acceptable ☐ Good


GARAGE
AREA 1
AREA 2
AREA 3
AREA 3
TREMONT AVE.
GARIBALDI AVE.
VOA
VOA
VOA

CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDE-001.135TRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SEWER TRASH)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-357

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
40	Info Sample #080 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 6.10 ppm
The criteria is <1 ppm

"I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
05-Aug-13 13:04

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1192
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~M1192-01~~	~~CDE-OU1-135TRE-35FL-070~~	~~Soil~~	~~17-Jul-13 11:05~~	~~18-Jul-13 10:20~~
M1192-02	CDE-OU1-135TRE-10FL-080	Soil	17-Jul-13 11:10	18-Jul-13 10:20

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-1
0FL-080

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1192 Mod. Ref No.: SDG No.: SM1192

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1192-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M1681F.D/E2M1681R.D

% Moisture: 25 Decanted: (Y/N) N Date Received: 07/18/2013

Extraction: (Type) SONC Date Extracted: 07/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	870	U
11104-28-2	Aroclor-1221	870	U
11141-16-5	Aroclor-1232	870	U
53469-21-9	Aroclor-1242	870	U
12672-29-6	Aroclor-1248	870	U
11097-69-1	Aroclor-1254	6100	
11096-82-5	Aroclor-1260	870	U
37324-23-5	Aroclor-1262	870	U
11100-14-4	Aroclor-1268	870	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1192 Mod. Ref No.: SDG No.: SM1192

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72786	93	90	82	85			0
02	LCS-72786	98	93	91	86			0
03	LCSD-72786	98	94	91	85			0
04	CDE-OU1-135T RE-35FL-079	80	76	71	71			0
05	CDE-OU1-135T RE-10FL-080	0 D	0 D	137 D	170 D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/17/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY - HOT 95-97°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D and MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION OF CONTAMINATED SOIL FROM WITHIN GRID SYSTEM AT 135 TREMONT.

Description of Chemical Data Acquisition Work Performed: TOTAL PCB ANALYSIS TO INCLUDE ADDITIONAL AROCLORS 1262, 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: MITCHEM LABS, OVERNIGHT FED EX.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NA

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/17/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/17/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/17/13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/17/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/17/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/17/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled, prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		7/17/13
CQC Systems Manager			

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13111302120326

Ship Date: 17JUL13
ActWgt: 20.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

THU - 18 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7962 5088 4960
0201

ED NCOA

02852
RI-US
PVD

51BG1/AA04/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796250884960
Ship date: 07/17/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-DUI-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-35FL-079	7/17/13	1105	G	SO		1			X								
	135TRE-10FL-080	7/17/13	1110	G	SO		1			X								
	TEMP										X							

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

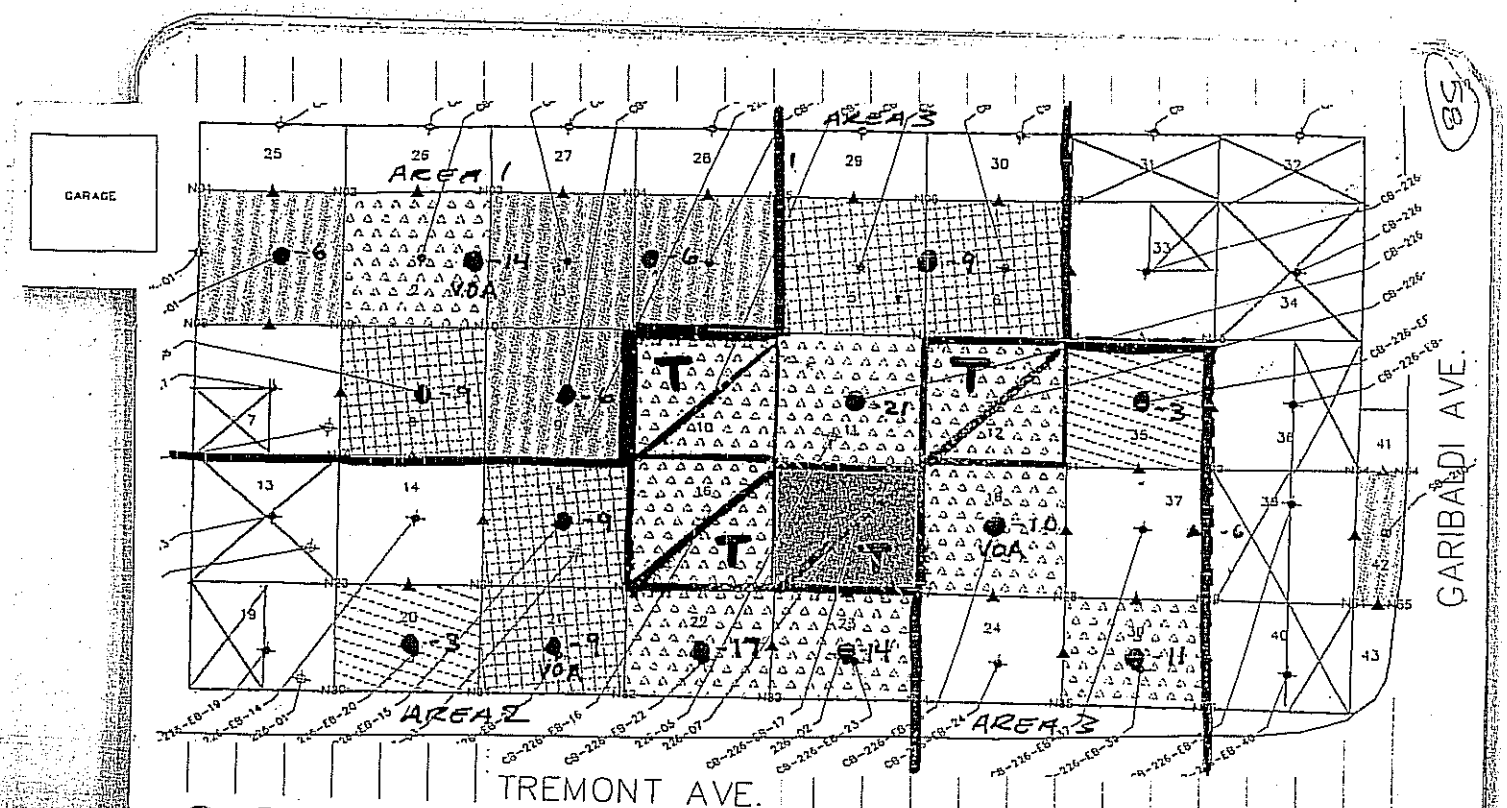
☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format ~~EMT~~ ETSCHUDI@SEVENSON.COM

Eric Tschudi

FED EX

1600

Condition Upon Receipt: ☐ Good ☐ Poor ☐ Broken ☐ Leaking ☐ Other


GARAGE
AREA 1
AREA 2
AREA 3
AREA 4
TREMONT AVE.
GARIBALDI AVE.

CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDE-DUI-13STRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SEWER TRASH)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-358

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
41	Info Sample #081 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 15.00 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
07-Aug-13 13:17

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1224
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1224-01	CDE-OU1-135TRE-11FL-081	Soil	22-Jul-13 11:00	23-Jul-13 10:00
~~M1224-02~~	~~CDE-OU1-135TRE-12FL-082~~	~~Soil~~	~~22-Jul-13 11:05~~	~~23-Jul-13 10:00~~
~~M1224-03~~	~~CDE-OU1-135TRE-12EW-084~~	~~Soil~~	~~22-Jul-13 11:15~~	~~23-Jul-13 10:00~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
1FL-081

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1224 Mod. Ref No.: SDG No.: SM1224

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1224-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H2577F.D/E4H2577R.D

% Moisture: 21 Decanted: (Y/N) N Date Received: 07/23/2013

Extraction: (Type) SONC Date Extracted: 07/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 100.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	4100	U
11104-28-2	Aroclor-1221	4100	U
11141-16-5	Aroclor-1232	4100	U
53469-21-9	Aroclor-1242	4100	U
12672-29-6	Aroclor-1248	4100	U
11097-69-1	Aroclor-1254	15000	
11096-82-5	Aroclor-1260	4100	U
37324-23-5	Aroclor-1262	4100	U
11100-14-4	Aroclor-1268	4100	U

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/22/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/22/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/22/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: HOT, HUMID, 88-90°F. PARTLY CLOUDY

Subcontractors Present Onsite: ~~NONE~~ TRANSPORTATION/TRUCKING COMPANY ON SITE.

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE, MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION OF EMPTY LOT AT 135 TREMONT AVENUE. SOIL SAMPLING OF SAME.

Description of Chemical Data Acquisition Work Performed: ANALYSIS OF SOIL SAMPLES: TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT TO MITKEM LABS NORTH KINGSTON, RI LOCATION VIA FED EX.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NOT AT THIS TIME.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

[signature] 7/22/13

Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/22/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date 7/22/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/22/13

☐ PREPARATORY PHASE

Yes	No	N/A		Comment
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	No	N/A		Comment
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled, prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUD	[signature]	7/22/13
CQC Systems Manager	William Zambrano	[signature]	7-22-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

To: SEVENSON ENVIRONMENTAL
3 HAMILTON BOULEVARD
TH PLAINFIELD, NJ 07080
769 5301

Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
= $NaHSO_4$ 9= 10= 11=

rinking Water GW=Groundwater WW=Wastewater
SW= Surface Water SO=Soil SL=Sludge A=Air
X2= X3=

G=Grab C=Composite

List preservative code below

Analyses

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

d:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-11FL-081	7/22/13	1100	G	SO		1			X								
	135TRE-12FL-082	7/22/13	1105	G	SO		1			X								
	~~135TRE-11FL-083~~	~~7/22/13~~	~~1110~~	~~G~~	~~SO~~		~~1~~			~~X~~								
	135TRE-12EW-084	7/22/13	1115	G	SO		1			X								
	Temp										X							

ail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
ormat

[signature]	FED EX	7/22/13	1600

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311130210326

Ship Date: 22JUL13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 23 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7962 8133 4696
0201

ED NCOA

02852
RI-US
PVD

518G1/AA04/03AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	Ship from:
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:

Tracking no.: 796281334696
Ship date: 07/22/2013
Estimated shipping charges: 0.00

Package Information

Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:

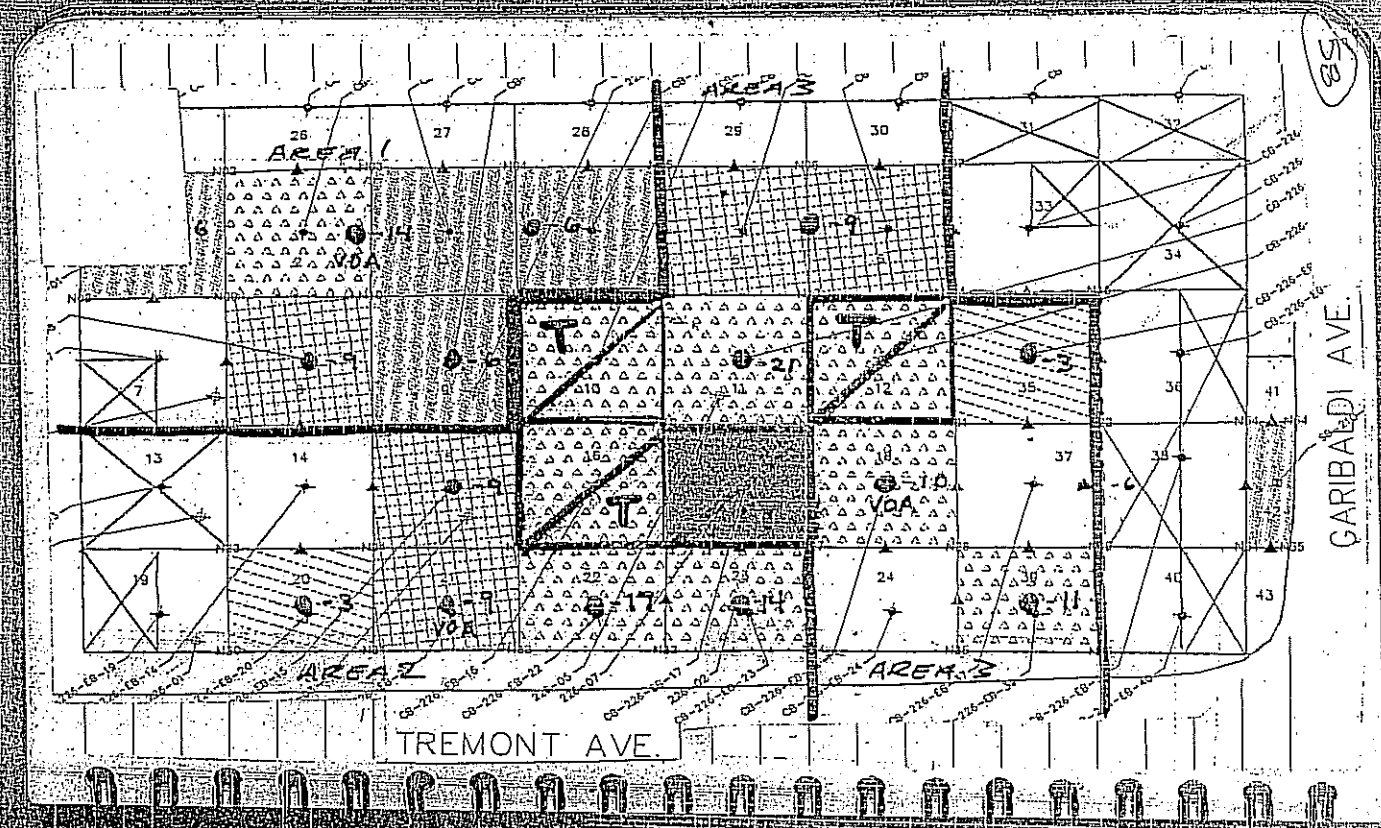
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


AREA 1
AREA 2
AREA 3
AREA 3
TREMONT AVE.
GARIBALDI AVE.
VOA
VOA
VOA
T
T
T

CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDE-OUI-135TRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SEWER TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-359

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
42	Final Sample #082 & 084 -135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #082 passed criteria for PCB's at 0.18 ppm
Sample #084 passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
07-Aug-13 13:17

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1224
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~M1224-01~~	~~CDE-OU1-135TRE-11FL-081~~	~~Soil~~	~~22-Jul-13 11:00~~	~~23-Jul-13 10:00~~
M1224-02	CDE-OU1-135TRE-12FL-082	Soil	22-Jul-13 11:05	23-Jul-13 10:00
M1224-04	CDE-OU1-135TRE-12EW-084	Soil	22-Jul-13 11:15	23-Jul-13 10:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
2FL-082

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1224 Mod. Ref No.: SDG No.: SM1224

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1224-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H2570F.D/E4H2570R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 07/23/2013

Extraction: (Type) SONC Date Extracted: 07/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	180	
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
2EW-084

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1224 Mod. Ref No.: SDG No.: SM1224

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1224-04A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H2571F.D/E4H2571R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 07/23/2013

Extraction: (Type) SONC Date Extracted: 07/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	35	J
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1224 Mod. Ref No.: SDG No.: SM1224

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72835	88	88	92	94			0
02	LCS-72835	85	84	91	93			0
03	CDE-OU1-135T RE-12FL-082	67	71	70	80			0
04	CDE-OU1-135T RE-12EW-084	70	74	72	84			0
05	CDE-OU1-135T RE-11FL-081	90	82	93	97			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/22/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		-
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI
Eric Tschudi

Date

7/22/13

DAILY CHEMICAL QUALITY CONTROL REPORT

(Page 1 of 2)

Date: 7/22/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: HOT, HUMID, 88-90°F. PARTLY CLOUDY

Subcontractors Present Onsite: ~~NONE~~ TRANSPORTATION/TRUCKING COMPANY ON SITE.

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE, MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION OF EMPTY LOT AT 135 TREMONT AVENUE. SOIL SAMPLING OF SAME.

Description of Chemical Data Acquisition Work Performed: ANALYSIS OF SOIL SAMPLES: TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT TO MITKEM LABS NORTH KINGSTON, RI LOCATION VIA FED EX.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NOT AT THIS TIME.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

[signature] 7/22/13

Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/22/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date 7/22/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/22/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☑	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUD	[signature]	7/22/13
CQC Systems Manager	William Zambrano	[signature]	7-22-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 30 days unless otherwise instructed.

ort To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
08 7695301

ect Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

=Drinking Water GW=Groundwater WW=Wastewater
Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X2= X3=

G=Grab C=Composite

List preservative code below

ab Id:	CDE-OUI- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-11FL-081	7/22/13	1100	G	SO		1			X								
	135TRE-12FL-082	7/22/13	1105	G	SO		1			X								
	~~135TRE-11FL-083~~	~~7/22/13~~	~~1110~~	~~G~~	~~SO~~		~~1~~			~~X~~								
	135TRE-12EW-084	7/22/13	1115	G	SO		1			X								
	Temp										X							

Containers

Analyses

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

mail to KLICKFIELD@SEVENSON.COM
Format ~~EMT~~ ETSCHUDI@SEVENSON.COM

Relinquished by:	Received by:	Date	Time
[signature]	FED EX	7/22/13	1600

Cooler upon receipt ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13111302120326

Ship Date: 22JUL13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 23 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7962 8133 4696
0201

ED NCOA

02852
RI-US
PVD

518G1/AA04/93AB

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	Ship from:
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796281334696
Ship date: 07/22/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

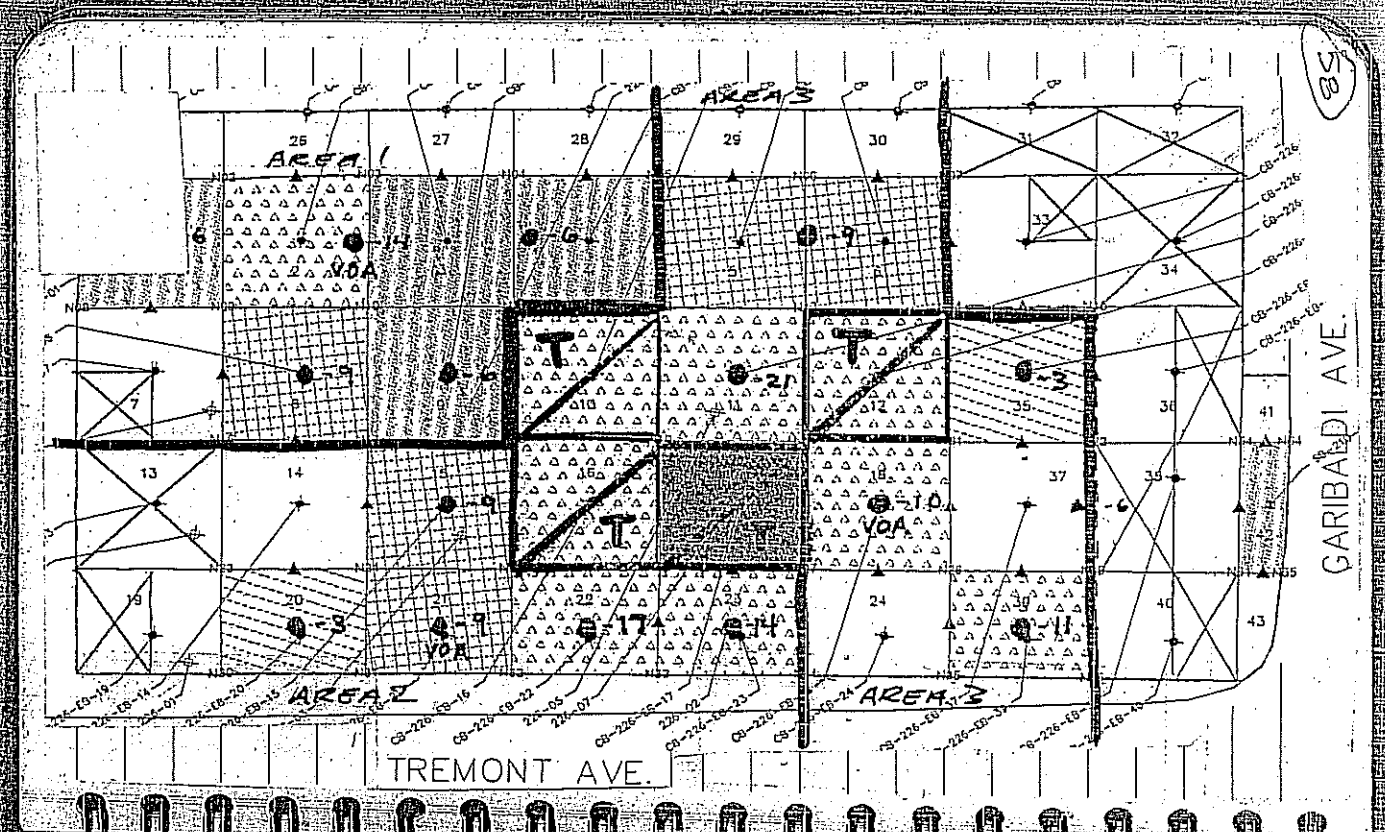
Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


AREA 1
AREA 2
AREA 3
AREA 4
TREMONT AVE.
GARIBALDI AVE.
VOA
VOA
VOA

CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDEQUI.13STRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SOLVENT TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-360

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
43	Info Sample #085 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 2.1 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
08-Aug-13 12:39

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1235
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1235-01	CDE-OU1-135TRE-16FL-085	Soil	23-Jul-13 09:45	24-Jul-13 10:30
~~M1235-02~~	~~CDE-OU1-135TRE-16NW-086~~	~~Soil~~	~~23-Jul-13 09:50~~	~~24-Jul-13 10:30~~
~~M1235-03~~	~~CDE-OU1-135TRE-16NW-087~~	~~Soil~~	~~23-Jul-13 10:00~~	~~24-Jul-13 10:30~~
~~M1235-04~~	~~CDE-OU1-135TRE-36SW-088~~	~~Soil~~	~~23-Jul-13 10:05~~	~~24-Jul-13 10:30~~
~~M1235-05~~	~~CDE-OU1-135TRE-18FL-089~~	~~Soil~~	~~23-Jul-13 10:30~~	~~24-Jul-13 10:30~~
~~M1235-06~~	~~CDE-OU1-135TRE-12SW-090~~	~~Soil~~	~~23-Jul-13 10:35~~	~~24-Jul-13 10:30~~
~~M1235-07~~	~~CDE-OU1-135TRE-18SW-091~~	~~Soil~~	~~23-Jul-13 11:00~~	~~24-Jul-13 10:30~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
6FL-085

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H2618F.D/E4H2618R.D

% Moisture: 23 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/25/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	850	U
11104-28-2	Aroclor-1221	850	U
11141-16-5	Aroclor-1232	850	U
53469-21-9	Aroclor-1242	850	U
12672-29-6	Aroclor-1248	850	U
11097-69-1	Aroclor-1254	2100	
11096-82-5	Aroclor-1260	850	U
37324-23-5	Aroclor-1262	850	U
11100-14-4	Aroclor-1268	850	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72860	101	97	96	97			0
02	LCS-72860	93	88	94	95			0
03	CDE-OU1-135T RE-36NW-087	69	64	62	69			0
04	CDE-OU1-135T RE-36SW-088	67	65	68	70			0
05	CDE-OU1-135T RE-18FL-089	73	71	73	75			0
06	CDE-OU1-135T RE-12SW-090	71	68	74	76			0
07	CDE-OU1-135T RE-18SW-091	63	61	67	69			0
08	CDE-OU1-135T RE-16FL-085	95	84	74	96			0
09	CDE-OU1-135T RE-16NW-086	88	83	88	93			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/23/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 83°F MOSTLY CLOUDY. HUMID.

Subcontractors Present Onsite: TRUCKING COMPANY.

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE, AND MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION OF CONTAMINATED MATERIAL. SAMPLING OF COMPLETED EXCAVATION AREAS.

Description of Chemical Data Acquisition Work Performed: ANALYSIS OF SOIL SAMPLES INCLUDES TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEM LABORATORY - OVERNIGHT VIA FEDEX TO THE N. KINGSTON, RI LOCATION.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 7/23/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/23/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI
7/23/13

Date

7/23/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/23/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/23/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/23/13

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/23/13
CQC Systems Manager	[illegible]	[illegible]	7-23-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

ort To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
08 7695301

ject Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

/=Drinking Water GW=Groundwater WW=Wastewater
Oil SW= Surface Water SO=Soil SL=Sludge A=Air
= X2= X3=

G=Grab C=Composite

Distinguishing Codes below

ab Id: GDE-DUIF	Sample Id:	Date: 2013	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.									QA/QC Reporting Level
	135TRE-16FL-085	7/23	0945	G	SO		1			X										☐ Level I ☐ Level II
	135TRE-16NW-086	7/23	0950	G	SO		1			X										☐ Level III ☐ Level IV
	135TRE-36NW-087	7/23	1000	G	SO		1			X										☐ Other
	135TRE-36SW-088	7/23	1005	G	SO		1			X										State specific reporting standards:
	135TRE-18FL-089	7/23	1030	G	SO		1			X										
	135TRE-12SW-090	7/23	1035	G	SO		1			X										
	135TRE-18SW-091	7/23	1100	G	SO		1			X										
	TEMPERATURE									X	X									

-mail to KLICKFIELD@SEVENSON.COM
EMT ETSCHUDI@SEVENSON.COM
Format

Eric Tschudi FED EX 7/23/13 1600

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311302120326

Ship Date: 23JUL13
ActWgt: 25.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

WED - 24 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7962 9345 3242
0201

ED NCOA

02852
RI-US
PVD

518G1/AA04/33AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796293453242
Ship date: 07/23/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

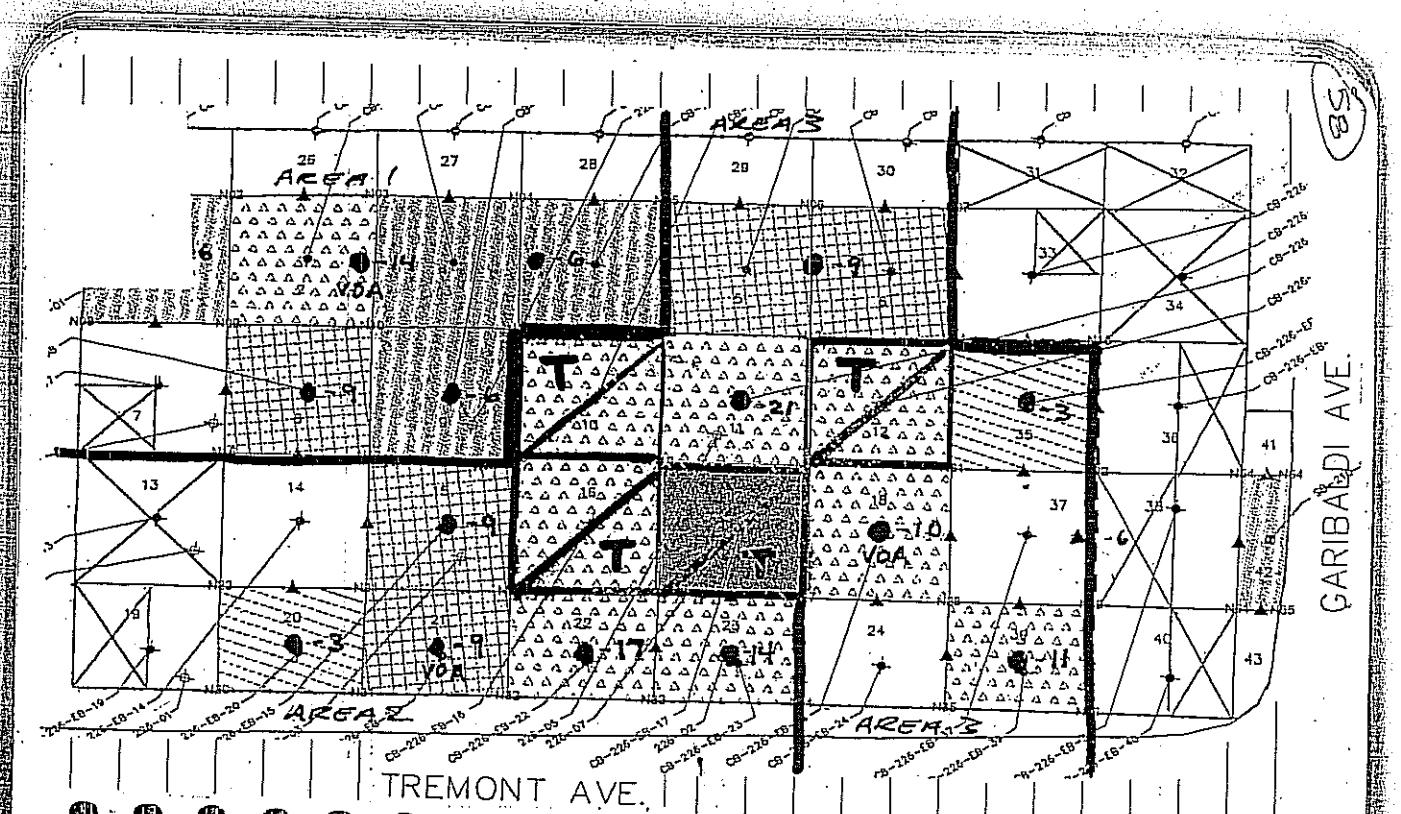
Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


AREA 1
AREA 2
AREA 3
AREA 4
TREMONT AVE.
GARIBALDI AVE.
VOA
T

CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDE-DU1-13STRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SOWER TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24
7/23/13	0945	16FL-085	36
7/23/13	0950	16NW-086	42
7/23/13	1000	36NW-087	6
7/23/13	1005	36SW-088	6
7/23/13	1030	18FL-089	20
7/23/13	1035	12SW-090	~~24~~ 28
7/23/13	1100	18SW-091	12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-361

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
44	Final Sample #086-#091 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #086 passed criteria for PCB's at 0.94 ppm
Sample #097 passed criteria for PCB's at 0.34 ppm
Sample #088 passed criteria for PCB's at 0 ppm - Non-detected
Sample #089 passed criteria for PCB's at 0.042 ppm
Sample #090 passed criteria for PCB's at 0 ppm - Non-detected
Sample #091 passed criteria for PCB's at 0.084 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
08-Aug-13 12:39

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1235
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~M1235-01~~	~~CDE-OU1-135TRE-16FL-085~~	~~Soil~~	~~23-Jul-13 09:15~~	~~24-Jul-13 10:30~~
M1235-02	CDE-OU1-135TRE-16NW-086	Soil	23-Jul-13 09:50	24-Jul-13 10:30
M1235-03	CDE-OU1-135TRE-36NW-087	Soil	23-Jul-13 10:00	24-Jul-13 10:30
M1235-04	CDE-OU1-135TRE-36SW-088	Soil	23-Jul-13 10:05	24-Jul-13 10:30
M1235-05	CDE-OU1-135TRE-18FL-089	Soil	23-Jul-13 10:30	24-Jul-13 10:30
M1235-06	CDE-OU1-135TRE-12SW-090	Soil	23-Jul-13 10:35	24-Jul-13 10:30
M1235-07	CDE-OU1-135TRE-18SW-091	Soil	23-Jul-13 11:00	24-Jul-13 10:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
6NW-086

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H2619F.D/E4H2619R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/25/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	940	
11096-82-5	Aroclor-1260	210	U
37324-23-5	Aroclor-1262	210	U
11100-14-4	Aroclor-1268	210	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-3
6NW-087

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H2587F.D/E4H2587R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	340	
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-36SW-088

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-04A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H2588F.D/E4H2588R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	33	J
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
8FL-089

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-05A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H2589F.D/E4H2589R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	42	
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-12SW-090

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-06A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H2590F.D/E4H2590R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
8SW-091

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1235-07A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H2591F.D/E4H2591R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 07/24/2013

Extraction: (Type) SONC Date Extracted: 07/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/24/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	84	
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1235 Mod. Ref No.: SDG No.: SM1235

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72860	101	97	96	97			0
02	LCS-72860	93	88	94	95			0
03	CDE-OU1-135T RE-36NW-087	69	64	62	69			0
04	CDE-OU1-135T RE-36SW-088	67	65	68	70			0
05	CDE-OU1-135T RE-18FL-089	73	71	73	75			0
06	CDE-OU1-135T RE-12SW-090	71	68	74	76			0
07	CDE-OU1-135T RE-18SW-091	63	61	67	69			0
08	CDE-OU1-135T RE-16FL-085	95	84	74	96			0
09	CDE-OU1-135T RE-16NW-086	88	83	88	93			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

Page 1 of 1 SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/23/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 83°F MOSTLY CLOUDY. HUMID.

Subcontractors Present Onsite: TRUCKING COMPANY.

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE, AND MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION OF CONTAMINATED MATERIAL. SAMPLING OF COMPLETED EXCAVATION AREAS.

Description of Chemical Data Acquisition Work Performed: ANALYSIS OF SOIL SAMPLES INCLUDES TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEM LABORATORY - OVERNIGHT FEDEX TO THE N. KINGSTON, RI LOCATION.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

7/23/13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/23/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI
7/23/13

Date

7/23/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/23/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled, prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/23/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/23/13

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/23/13
CQC Systems Manager	[illegible]	[illegible]	7-23-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

To: SEVENSON ENVIRONMENTAL
3 HAMILTON BOULEVARD
UTH PLAINFIELD, NJ 07080
769 5101

Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

rinking Water GW=Groundwater WW=Wastewater
SW= Surface Water SO=Soil SL=Sludge A=Air
X2= X3=

G=Grab C=Composite

CDE-DUF

Sample Id:	Date: 2013	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.
135TRE-16FL-085	7/23	0945	G	SO		1			X	
135TRE-16NW-086	7/23	0950	G	SO		1			X	
135TRE-36NW-087	7/23	1000	G	SO		1			X	
135TRE-36SW-088	7/23	1005	G	SO		1			X	
135TRE-18FL-089	7/23	1030	G	SO		1			X	
135TRE-12SW-090	7/23	1035	G	SO		1			X	
135TRE-18SW-091	7/23	1100	G	SO		1			X	
TEMPERATURE										X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

il to KLICKFIELD@SEVENSON.COM
ail: ETSCHUDI@SEVENSON.COM

FED. EX

7/23/13 1600

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311302120026

Ship Date: 23JUL13
ActWgt: 25.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 24 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7962 9345 3242
0201

ED NCOA

02852
RI-US
PVD

516GI/AA04/83AB

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	Ship from:
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:

Tracking no.: 796293453242
Ship date: 07/23/2013
Estimated shipping charges: 0.00

Package Information

Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:

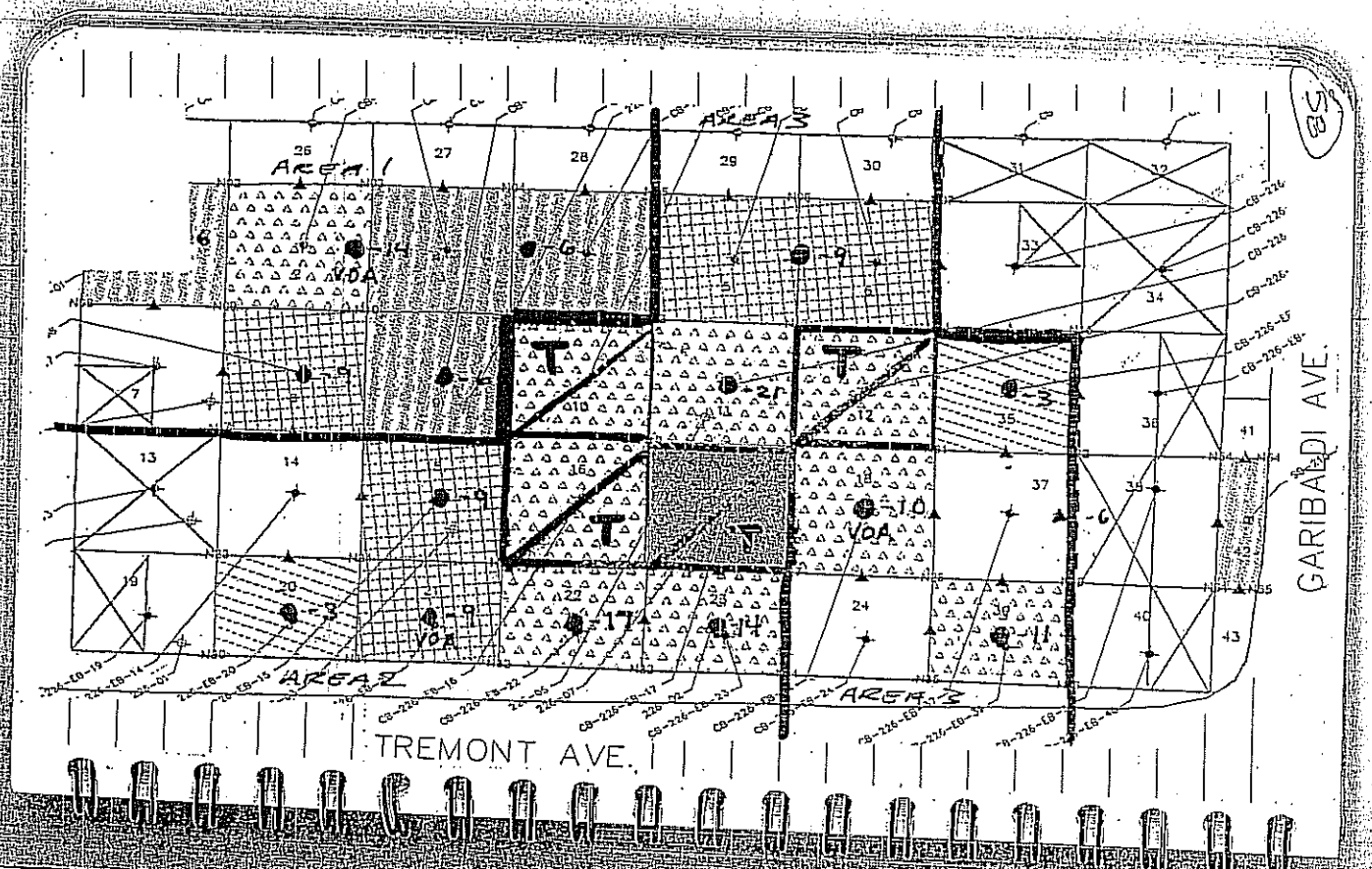
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


AREA 1
AREA 2
AREA 3
TREMONT AVE.
GARIBALDI AVE.
VOA

CONTINUED FOR SOIL SAMPLE

DATE	TIME	CDE-001-13STRE-	DEPTH (" BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SOLVENT TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24
7/23/13	0945	16FL-085	36
7/23/13	0950	16NW-086	42
7/23/13	1000	36NW-087	6
7/23/13	1005	36SW-088	6
7/23/13	1030	18FL-089	20
7/23/13	1035	12SW-090	~~24~~ 28
7/23/13	1100	18SW-091	12

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-362

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
45	Final Sample #092-#095 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS

Sample #092 passed criteria for PCB's at 0.25 ppm
Sample #093 passed criteria for PCB's at 0 ppm - Non-detected
Sample #094 passed criteria for PCB's at 0.26 ppm
Sample #095 passed criteria for PCB's at 0 ppm - Non-detected

The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
14-Aug-13 09:23

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1265
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1265-01	CDE-OU1-135TRE-23EW-092	Soil	25-Jul-13 11:00	26-Jul-13 08:50
M1265-02	CDE-OU1-135TRE-23SW-093	Soil	25-Jul-13 11:05	26-Jul-13 08:50
M1265-03	CDE-OU1-135TRE-11SW-094	Soil	25-Jul-13 11:10	26-Jul-13 08:50
M1265-04	CDE-OU1-135TRE-12NW-095	Soil	25-Jul-13 11:30	26-Jul-13 08:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
3EW-092

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1265 Mod. Ref No.: SDG No.: SM1265

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1265-01A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H2665F.D/E4H2665R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 07/26/2013

Extraction: (Type) SONC Date Extracted: 07/26/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/27/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	250	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
3SW-093

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1265 Mod. Ref No.: SDG No.: SM1265

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1265-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H2666F.D/E4H2666R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 07/26/2013

Extraction: (Type) SONC Date Extracted: 07/26/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/27/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
1SW-094

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1265 Mod. Ref No.: SDG No.: SM1265

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1265-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H2667F.D/E4H2667R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 07/26/2013

Extraction: (Type) SONC Date Extracted: 07/26/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/27/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	260	
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
2NW-095

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1265 Mod. Ref No.: SDG No.: SM1265

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1265-04A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E4H2668F.D/E4H2668R.D

% Moisture: 4.0 Decanted: (Y/N) N Date Received: 07/26/2013

Extraction: (Type) SONC Date Extracted: 07/26/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/27/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U
37324-23-5	Aroclor-1262	34	U
11100-14-4	Aroclor-1268	34	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1265 Mod. Ref No.: SDG No.: SM1265

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72908	89	83	94	91			0
02	LCS-72908	92	87	95	95			0
03	CDE-OU1-135T RE-23EW-092	69	64	69	72			0
04	CDE-OU1-135T RE-23SW-093	65	62	72	71			0
05	CDE-OU1-135T RE-11SW-094	70	66	73	73			0
06	CDE-OU1-135T RE-12NW-095	73	69	79	79			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

Page 1 of 1 SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/25/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: MOSTLY CLOUDY. HIGH TEMP 75°.

Subcontractors Present Onsite: TRUCK DRIVERS - DISPOSAL COMPANY.

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D OR LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, SAMPLING OF GRIDS 23, 11, AND 12.

Description of Chemical Data Acquisition Work Performed: TOTAL PCB ANALYSIS WITH ADDITIONAL AROCLORS 1262, AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SOIL SAMPLE SHIPPED (4) FOUR SAMPLES TO MITKEM LAB'S N. KINGSTON, RI LOCATION VIA FEDEX OVERNIGHT.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

[signature]

Date

7/25/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/25/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

7/25/13

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	7/25/13
CQC Systems Manager	William Zarbran	[illegible]	7-25-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 7 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

W=Drinking Water GW=Groundwater WW=Wastewater
Oil SW= Surface Water SO=Soil SL=Sludge A=Air
= X2= X3=

G=Grab C=Composite

GDE-DUI-

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.								
	135TRE-23EW-092	7/25/13	1100	G	SO		1			X									
	135TRE-23SW-093	7/25/13	1105	G	SO		1			X									
	135TRE-11SW-094	7/25/13	1110	G	SO		1			X									
	135TRE-12NW-095	7/25/13	11:30	G	SO		1			X									
	TEMPERATURE									X	X								

E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
D Format

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

FED EX

7/25/13 1600

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311302120026

Ship Date: 25JUL13
ActWgt: 20.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 26 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7963 1618 0698
0201

ED NCOA

02852
RI-US
PVD

518G1/AA04/03AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796316180698
Ship date: 07/25/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

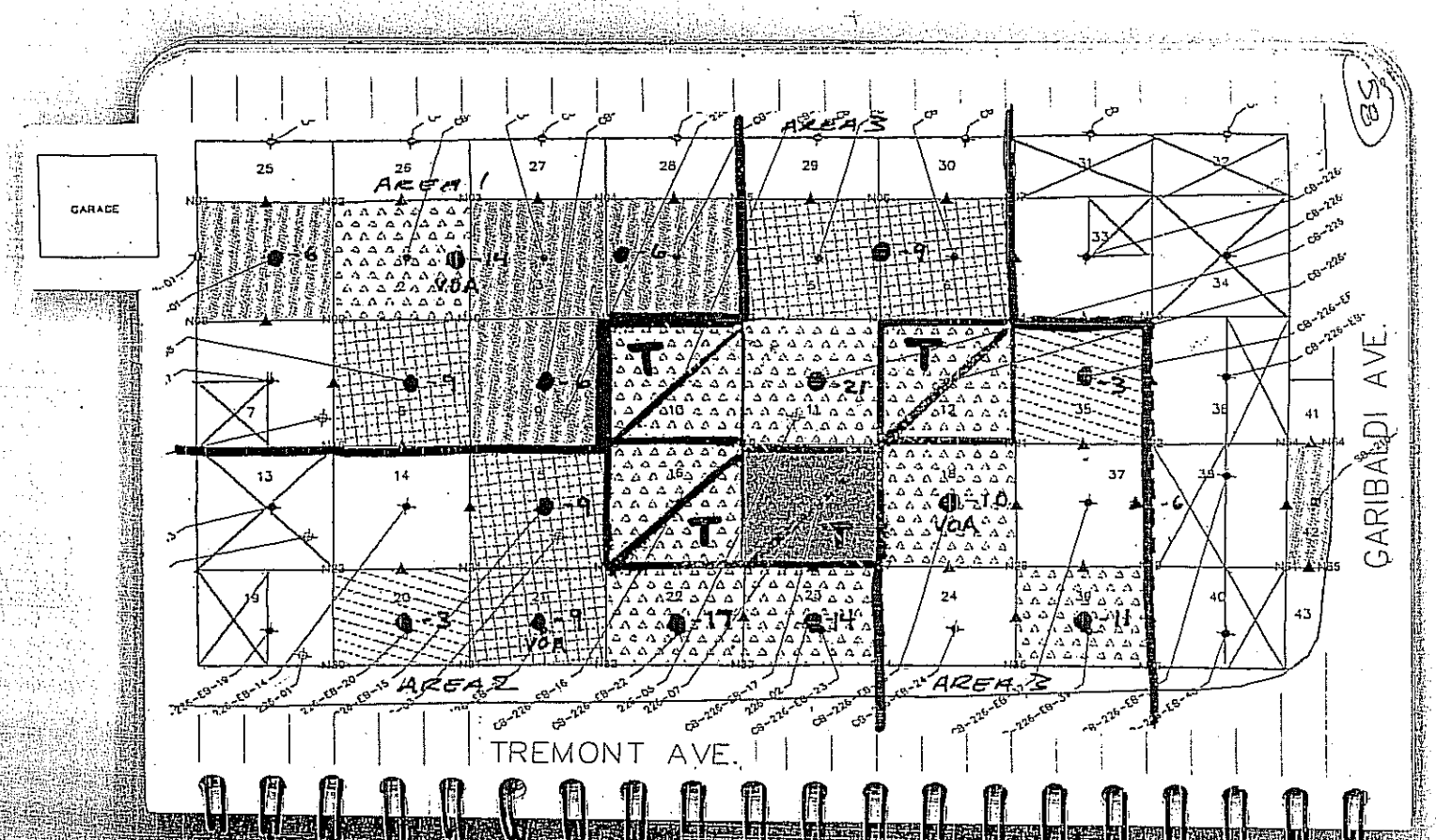
Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


GARAGE
AREA 1
AREA 2
AREA 3
AREA 4
VOA
TREMONT AVE.
GARIBALDI AVE.

CONTINUED FOR SOIL SAMPLE

DATE	TIME	CDE-04-135TRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SEWER TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24
7/23/13	0945	16FL-085	36
7/23/13	0950	16NW-086	42
7/23/13	1000	36NW-087	6
7/23/13	1005	36SW-088	6
7/23/13	1030	18FL-089	20
7/23/13	1035	12SW-090	~~24~~ 28
7/23/13	1100	18SW-091	12
7/25/13	1100	23EW-092	14"
7/25/13	1105	23SW-093	14"
7/25/13	1110	11SW-094	30"
7/25/13	1150	12NW-095	28"

GARAGE

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-363

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
46	Final Sample #096-#097 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #096 passed criteria for PCB's at 0 ppm - Non-detected
Sample #097 passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
15-Aug-13 08:30

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1298
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1298-01	CDE-OU1-135TRE-16EW-096	Soil	29-Jul-13 14:30	30-Jul-13 10:07
M1298-02	CDE-OU1-135TRE-10NW-097	Soil	29-Jul-13 14:35	30-Jul-13 10:07
~~M1298-03~~	~~CDE-OU1-135TRE-11NW-098~~	~~Soil~~	~~29-Jul-13 14:40~~	~~30-Jul-13 10:07~~

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-16EW-096

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1298 Mod. Ref No.: SDG No.: SM1298

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1298-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H2819F.D/E4H2819R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 07/30/2013

Extraction: (Type) SONC Date Extracted: 07/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
0NW-097

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1298 Mod. Ref No.: SDG No.: SM1298

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1298-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H2820F.D/E4H2820R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 07/30/2013

Extraction: (Type) SONC Date Extracted: 07/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1298 Mod. Ref No.: SDG No.: SM1298

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72967	93	84	111	109			0
02	LCS-72967	89	80	108	107			0
03	LCSD-72967	88	80	105	107			0
04	CDE-OU1-135T RE-16EW-096	74	67	92	91			0
05	CDE-OU1-135T RE-10NW-097	64	59	81	82			0
06	CDE-OU1-135T RE-11NW-098	102	91	169 D	114			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/29/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 80° ~~MOSTLY~~ PARTLY CLOUDY, WIND 5 MPH - NORTH.

Subcontractors Present Onsite: TRUCKING COMPANY. SURVEYOR.

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE REQUIRED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, PCB SOIL SAMPLES COLLECTED IN GRIDS 10, 11, 16 AT PROP ID 226

Description of Chemical Data Acquisition Work Performed: TOTAL PCB ANALYSIS TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE. SAMPLES SHIPPED VIA FED EX TO LUTKEM LABS OF NORTH KINGSTON, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

[signature] 7/29/13

Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/29/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/29/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/29/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC FSCHUDI		7/29/13
CQC Systems Manager	William Zachman		7-29-13

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/29/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?			
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI
Eric Tschudi

Date

7/29/13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

W=Drinking Water GW=Groundwater WW=Wastewater
=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-DUI-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.								
	135TRE-16EW-096	7/29/13	1430	G	SO		1			X									
	135TRE-10NW-097	7/29/13	1435	G	SO		1			X									
	135TRE-11NW-098	7/29/13	1440	G	SO		1			X		1							
	TEMP										X								

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM
D Format

FED EX

7/29/13 1600

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13111302120326

Ship Date: 29JUL13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3480

BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 30 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7963 4038 0323
0201

ED NCOA

02852
RI-US
PVD

518G1/AA04/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796340380323
Ship date: 07/29/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

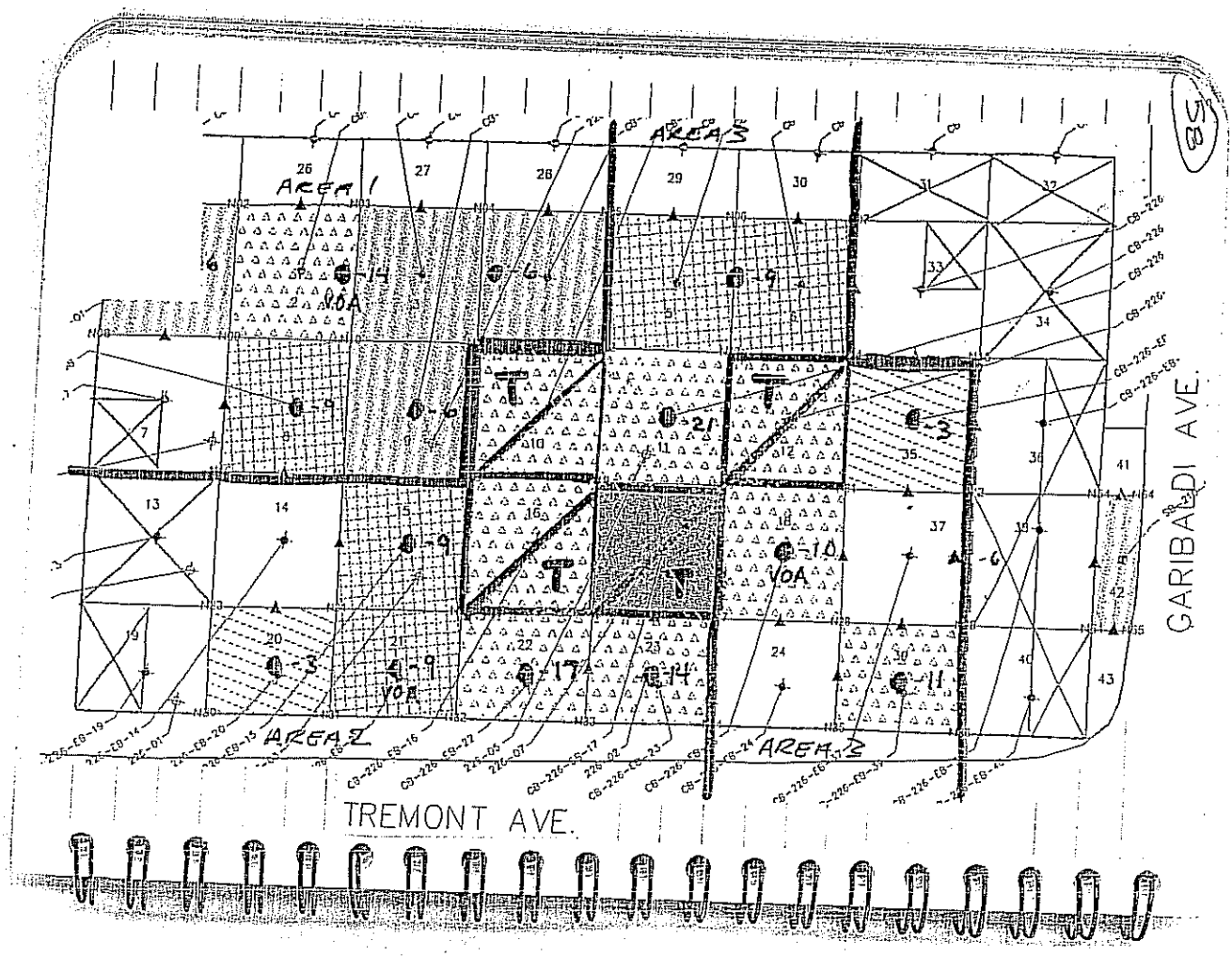
Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

CONTINUED FOR SOIL SAMPLE

DATE	TIME	CDE-011.135TRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SEWER TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24
7/23/13	0945	16FL-085	36
7/23/13	0950	16NW-086	42
7/23/13	1000	36NW-087	6
7/23/13	1005	36SW-088	6
7/23/13	1030	18FL-089	20
7/23/13	1035	12SW-090	~~24~~ 28
7/23/13	1100	18SW-091	12
7/25/13	1100	23EW-092	14"
7/25/13	1105	23SW-093	14"
7/25/13	1110	11SW-094	30"
7/25/13	1150	12NW-095	28"
7/29/13	1430	16EW-096	36"
7/29/13	1435	10NW-097	40"
7/29/13	1440	11NW 098	40"


AREA 1
AREA 3
AREA 2
AREA 2
TREMONT AVE.
GARIBALDI AVE.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/04/2013

TRANSMITTAL NO.: 01450A-364

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See Instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
47	Info Sample #098 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample failed criteria for PCB's at 19.00 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
15-Aug-13 08:30

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1298
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
~~M1298-01~~	~~CDE-OU1-135TRE-16EW-096~~	~~Soil~~	~~29-Jul-13 14:30~~	~~30-Jul-13 10:07~~
~~M1298-02~~	~~CDE-OU1-135TRE-10NW-097~~	~~Soil~~	~~29-Jul-13 14:35~~	~~30-Jul-13 10:07~~
M1298-03	CDE-OU1-135TRE-11NW-098	Soil	29-Jul-13 14:40	30-Jul-13 10:07

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
1NW-098

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1298 Mod. Ref No.: SDG No.: SM1298

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1298-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H2829F.D/E4H2829R.D

% Moisture: 21 Decanted: (Y/N) N Date Received: 07/30/2013

Extraction: (Type) SONC Date Extracted: 07/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 125.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	5200	U
11104-28-2	Aroclor-1221	5200	U
11141-16-5	Aroclor-1232	5200	U
53469-21-9	Aroclor-1242	5200	U
12672-29-6	Aroclor-1248	5200	U
11097-69-1	Aroclor-1254	19000	
11096-82-5	Aroclor-1260	5200	U
37324-23-5	Aroclor-1262	5200	U
11100-14-4	Aroclor-1268	5200	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1298 Mod. Ref No.: SDG No.: SM1298

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-72967	93	84	111	109			0
02	LCS-72967	89	80	108	107			0
03	LCSD-72967	88	80	105	107			0
04	CDE-OU1-135T RE-16EW-096	74	67	92	91			0
05	CDE-OU1-135T RE-10NW-097	64	59	81	82			0
06	CDE-OU1-135T RE-11NW-098	102	91	169 D	114			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 7/29/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 80° ~~MOSTLY~~ PARTLY CLOUDY, WIND 5MPH - NORTH.

Subcontractors Present Onsite: TRUCKING COMPANY. SURVEYOR.

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE REQUIRED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, PCB SOIL SAMPLES COLLECTED IN GRIDS 10, 11, 16 AT PROP ID 226

Description of Chemical Data Acquisition Work Performed: TOTAL PCB ANALYSIS TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE. SAMPLES SHIPPED VIA FEDEX TO LUTKEM LABS OF NORTH KINGSTON, RI.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/29/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/29/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/29/13

☐ PREPARATORY PHASE

Yes	No	N/A		Comment
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☐ FOLLOW-UP PHASE

Yes	No	N/A		Comment
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC ESCHUDI _____ 7/29/13
Name Signature Date

CQC Systems Manager William Zaubrec _____ 7-29-13
Name Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7/29/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?			
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

7/29/13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

...t To: SEVENSON ENVIRONMENTAL
...33 HAMILTON BOULEVARD
...OUTH PLAINFIELD, NJ 07080
...7695301

...ct Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

...Drinking Water GW=Groundwater WW=Wastewater
...l SW= Surface Water SO=Soil SL=Sludge A=Air
X2= X3=

G=Grab C=Composite

...Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-16EW-096	7/29/13	1430	G	SO		1			X								
	135TRE-10NW-097	7/29/13	1435	G	SO		1			X								
	135TRE-11NW-098	7/29/13	1440	G	SO		1			X								
	TEMP										X							

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State specific reporting standards:

...ail to KLICKFIELD@SEVENSON.COM
...ormat ~~EMT~~ ETSCHUDI@SEVENSON.COM

Relinquished by	Received by	Date	Time
[signature]	FED EX	7/29/13	1600

...on upon receipt ☐ Iced ☐ Ambient ☐ C...

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1311302120326

Ship Date: 29JUL13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400
BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 30 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 7963 4038 0323
0201

ED NCOA

02852
RI-US
PVD

51BG1/AA04/03A8

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	Ship from:
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796340380323
Ship date: 07/29/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

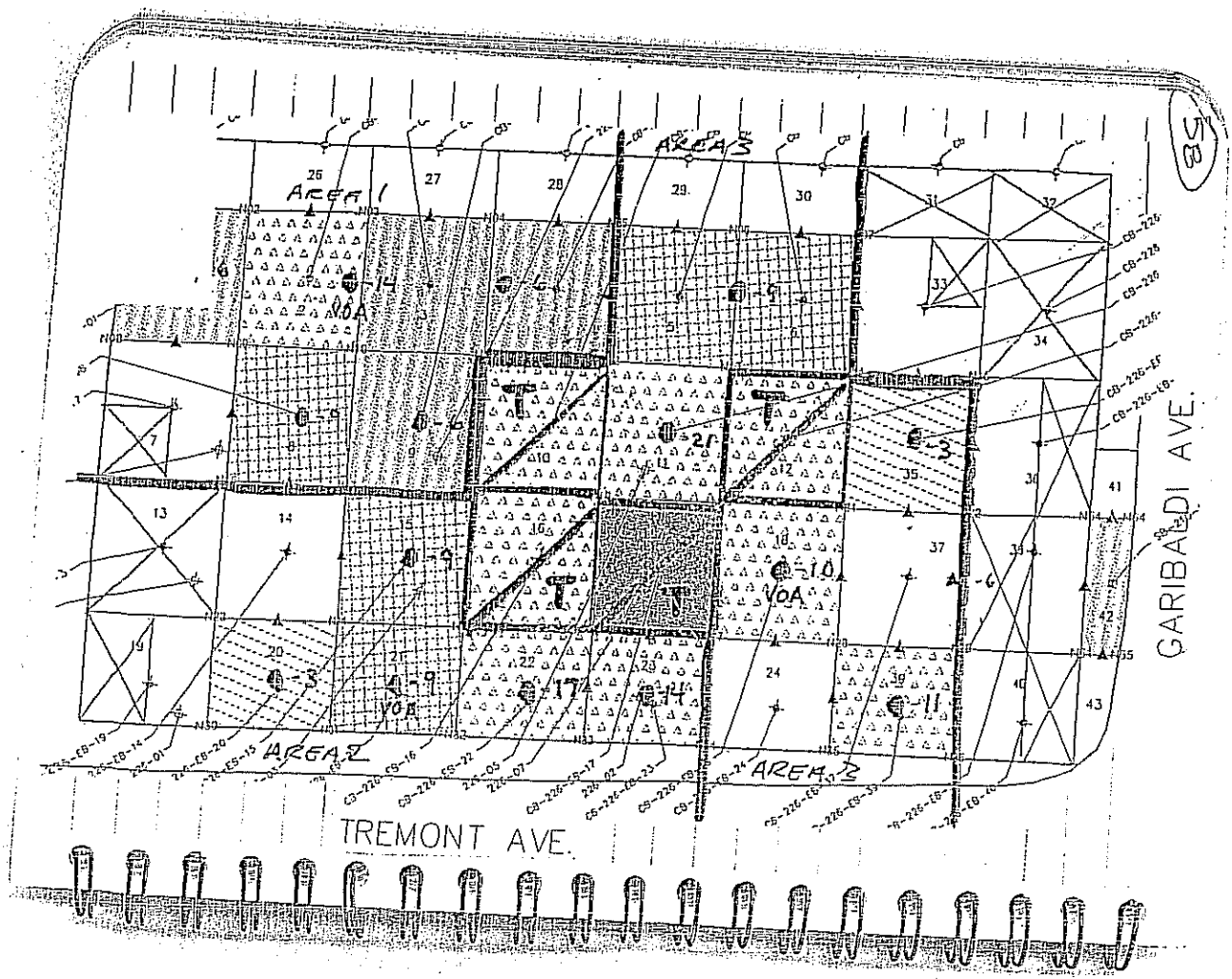
Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDE-CVI-135TRE-	DEPTH ("BLS)
7/17/13	1105	35FL-79	12'
7/17/13	1110	10FL-80	42" (SEWER TRASH)
7/22/13	1100	11FL-081	42
7/22/13	1105	12FL-082	46
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL
7/22/13	1115	12EW-084	24
7/23/13	0945	16FL-085	36
7/23/13	0950	16NW-086	42
7/23/13	1000	36NW-087	6
7/23/13	1005	36SW-088	6
7/23/13	1030	18FL-089	20
7/23/13	1035	12SW-090	~~24~~ 28
7/23/13	1100	18SW-091	12
7/25/13	1100	23EW-092	14"
7/25/13	1105	23SW-093	14"
7/25/13	1110	11SW-094	30"
7/25/13	1130	12NW-095	28"
7/29/13	1430	16EW-096	36"
7/29/13	1435	10NW-097	40"
7/29/13	1440	11NW 098	40"


AREA 1
AREA 3
AREA 2
AREA 2
TREMONT AVE.
GARIBALDI AVE.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/05/2013

TRANSMITTAL NO.: 01450A-365

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
48	Final Sample #099-#103 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #099 passed criteria for PCB's at 0.26 ppm
Sample #100 passed criteria for PCB's at 0 ppm - Non-detected
Sample #101 passed criteria for PCB's at 0 ppm - Non-detected
Sample #102 passed criteria for PCB's at 0.04 ppm
Sample #102 passed criteria for PCB's at 0.23 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
19-Aug-13 09:12

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1327
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1327-01	CDE-OU1-135TRE-6NW-099	Soil	01-Aug-13 11:45	02-Aug-13 11:00
M1327-02	CDE-OU1-135TRE-6EW-100	Soil	01-Aug-13 11:50	02-Aug-13 11:00
M1327-03	CDE-OU1-135TRE-11/5NWW-101	Soil	01-Aug-13 12:00	02-Aug-13 11:00
M1327-04	CDE-OU1-135TRE-11/5NWE-102	Soil	01-Aug-13 12:05	02-Aug-13 11:00
M1327-05	CDE-OU1-135TRE-5NW-103	Soil	01-Aug-13 12:10	02-Aug-13 11:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-6
NW-099

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1327 Mod. Ref No.: SDG No.: SM1327

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1327-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M2347F.D/E2M2347R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 08/02/2013

Extraction: (Type) SONC Date Extracted: 08/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	260	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-6
EW-100

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1327 Mod. Ref No.: SDG No.: SM1327

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1327-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M2348F.D/E2M2348R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 08/02/2013

Extraction: (Type) SONC Date Extracted: 08/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
1/5NWW-101

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1327 Mod. Ref No.: SDG No.: SM1327

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1327-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M2349F.D/E2M2349R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 08/02/2013

Extraction: (Type) SONC Date Extracted: 08/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	24	J
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
1/5NWE-102

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1327 Mod. Ref No.: SDG No.: SM1327

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1327-04A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E2M2350F.D/E2M2350R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 08/02/2013

Extraction: (Type) SONC Date Extracted: 08/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	44	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-5
NW-103

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1327 Mod. Ref No.: SDG No.: SM1327

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1327-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2M2351F.D/E2M2351R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 08/02/2013

Extraction: (Type) SONC Date Extracted: 08/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	230	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1327 Mod. Ref No.: SDG No.: SM1327

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73035	82	86	88	86			0
02	LCS-73035	84	89	88	89			0
03	CDE-OU1-135T RE-6NW-099	70	74	70	73			0
04	CDE-OU1-135T RE-6EW-100	65	67	70	67			0
05	CDE-OU1-135T RE-11/5NWW-101	65	68	71	68			0
06	CDE-OU1-135T RE-11/5NWE-102	68	71	72	72			0
07	CDE-OU1-135T RE-5NW-103	69	72	69	71			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.07.22.A

Page 1 of 1

SW846

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/01/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 75°F RAIN MOST OF THE DAY. WIND - CALM.

Subcontractors Present Onsite: TRUCKING COMPANY.

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PPE REQUIRED.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION, SAMPLING OF GRIDS: 6, 11, 5.

Description of Chemical Data Acquisition Work Performed: TOTAL PCB SAMPLING ANALYSIS, TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED VIA FED EX TO MITICEM LAB, N. KINGSTON, RI.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/01/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment? –	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/01/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/01/13

☐ PREPARATORY PHASE

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ INITIAL PHASE OR ☒ FOLLOW-UP PHASE

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	ERIC TSCHUDI		8/01/13
CQC Systems Manager	William Zamsrade		8-1-13

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/01/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/01/13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

W=Drinking Water GW=Groundwater WW=Wastewater
=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
= X2= X3=

G=Grab C=Composite

List preservative code below

Lab Id:	Sample Id: CDE-OU1-	Date: 2013	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-6NW-099	8/01	1145	G	SO		1			X								
	135TRE-6EW-100	8/01	1150	G	SO		1			X								
	135TRE-11/5NWW-101	8/01	~~1155~~ 1200	G	SO		1			X								
	135TRE-11/5NWE-102	8/01	1205	G	SO		1			X								
	135TRE-5NW-103	8/01	1210	G	SO		1			X								
	TEMP.										X							

Analyses

Notes

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
Format

Relinquished by: [signature]

Received by: FED EX

Date: 8/01/13 Time: 1600

Action upon receipt: ☐ Used ☐ Ambient ☐ Cold

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13111302120325

Ship Date: 01AUG13
ActWgt: 15.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 02 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7963 7116 7319
0201

ED NCOA

02852
RI-US
PVD

510G1/AA04/93A6

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796371167319
Ship date: 08/01/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

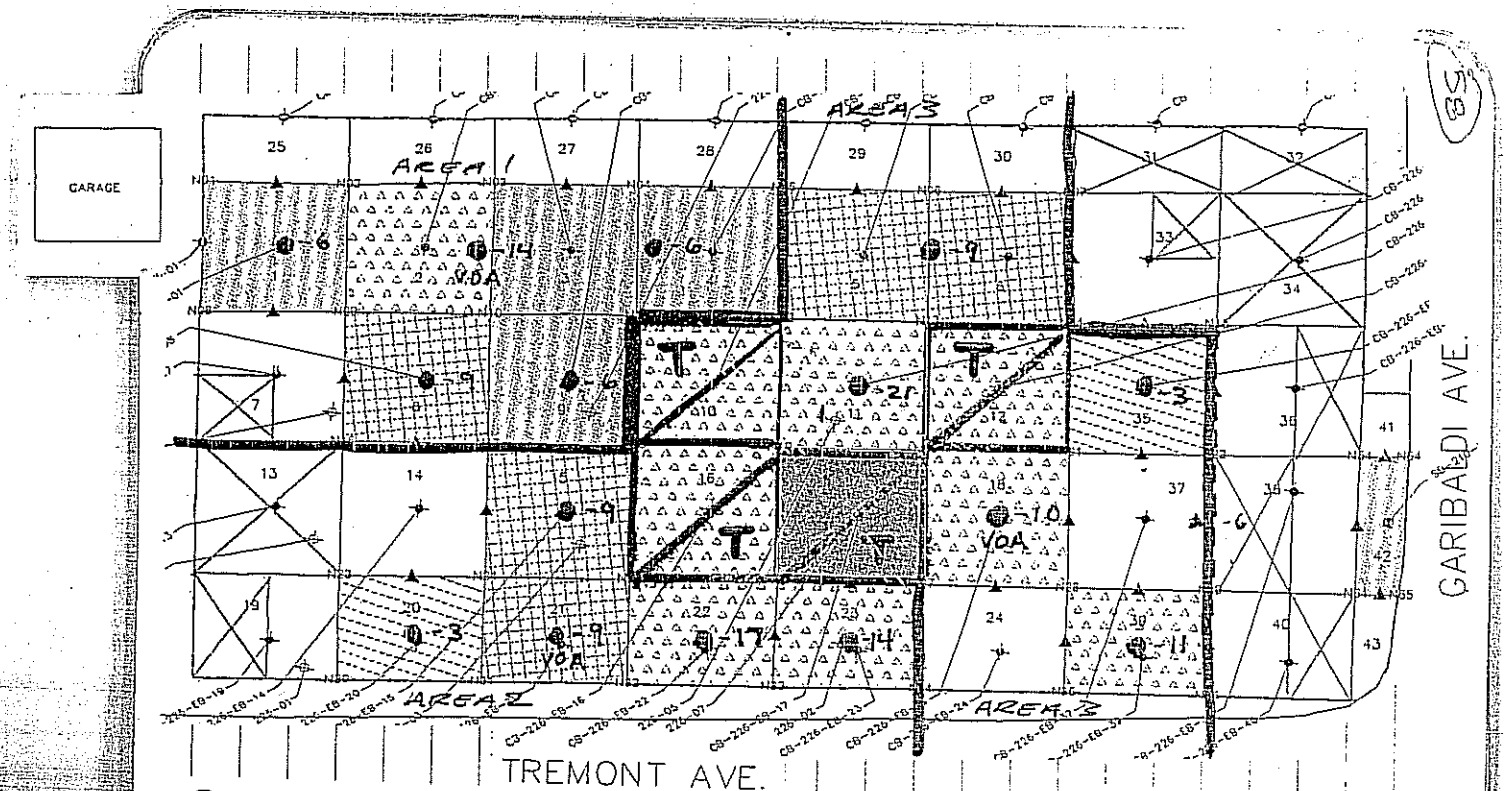
FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

(64) CONTINUED PCB SOIL SAMPLE

DATE	TIME	CDE-BW-135TRE-	DEPTH (" BLS)	
7/17/13	1105	35FL-79	12'	
7/17/13	1110	10FL-80	42"	(SEWER TRASH)
7/22/13	1100	11FL-081	42	15.000
7/22/13	1105	12FL-082	46	0.180
~~7/22/13~~	~~1110~~	~~16FL-083~~	~~36~~ REMOVE CANCEL	
7/22/13	1115	12EW-084	24	0.035
7/23/13	0945	16FL-085	36	2.100
7/23/13	0950	16NW-086	42	0.940
7/23/13	1000	36NW-087	6	0.340
7/23/13	1005	36SW-088	6	0.033
7/23/13	1030	18FL-089	20	0.042
7/23/13	1035	12SW-090	~~24~~ 28	ND
7/23/13	1100	18SW-091	12	0.084
7/25/13	1100	23EW-092	14"	0.250
7/25/13	1105	23SW-093	14"	ND
7/25/13	1110	11SW-094	30"	0.260
7/25/13	1150	12NW-095	28"	ND
7/29/13	1430	16EW-096	36"	ND
7/29/13	1435	10NW-097	40"	ND
7/29/13	1440	11NW 098	40"	19.000
8/01/13	1145	6NW 099	12"	
8/01/13	1150	6EW 100	12"	
8/01/13	1200	11/5 ~~5/11~~ NWW 101	40"	
8/01/13	1205	11/5 NWW 102	40"	
8/01/13	1210	5NW 103	12"	

SEE CONTINUATION OF SOIL SAMPLING LOG IN #2.


GARAGE
AREA 1
AREA 2
AREA 3
TREMONT AVE.
GARIBALDI AVE.
VOA
T

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 01450A-369

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
49	Info Sample #104 & 106 -135 Tremont	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #104 failed criteria for PCB's at 5.00 ppm
Sample #106 failed criteria for PCB's at 5.20 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
23-Aug-13 12:48

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1344
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1344-01	CDE-OU1-135TRE-3NW-104	Soil	05-Aug-13 11:20	06-Aug-13 09:20
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M1344-03	CDE-OU1-135TRE-10WW-106	Soil	05-Aug-13 13:30	06-Aug-13 09:20

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-3
NW-104

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1344 Mod. Ref No.: SDG No.: SM1344

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1344-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H3091F.D/E4H3091R.D

% Moisture: 21 Decanted: (Y/N) N Date Received: 08/06/2013

Extraction: (Type) SONC Date Extracted: 08/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 40.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1700	U
11104-28-2	Aroclor-1221	1700	U
11141-16-5	Aroclor-1232	1700	U
53469-21-9	Aroclor-1242	1700	U
12672-29-6	Aroclor-1248	1700	U
11097-69-1	Aroclor-1254	5000	
11096-82-5	Aroclor-1260	1700	U
37324-23-5	Aroclor-1262	1700	U
11100-14-4	Aroclor-1268	1700	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-1
OWW-106

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1344 Mod. Ref No.: SDG No.: SM1344

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1344-03A

Sample wt/vol: 30.8 (g/mL) G Lab File ID: E4H3092F.D/E4H3092R.D

% Moisture: 8.7 Decanted: (Y/N) N Date Received: 08/06/2013

Extraction: (Type) SONC Date Extracted: 08/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 40.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (~~ug/L~~ or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	1400	U
11104-28-2	Aroclor-1221	1400	U
11141-16-5	Aroclor-1232	1400	U
53469-21-9	Aroclor-1242	1400	U
12672-29-6	Aroclor-1248	1400	U
11097-69-1	Aroclor-1254	5200	
11096-82-5	Aroclor-1260	1400	U
37324-23-5	Aroclor-1262	1400	U
11100-14-4	Aroclor-1268	1400	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1344 Mod. Ref No.: SDG No.: SM1344

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73062	105	101	92	88			0
02	LCS-73062	93	89	90	86			0
03	CDE-OU1-135T RE-4NW-105	75	74	68	67			0
04	CDE-OU1-135T RE-3NW-104	89	87	92	91			0
05	CDE-OU1-135T RE-10WW-106	93	87	95	92			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.08.22.A

Page 1 of 1

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/5/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	Y		
Were logbooks filled out properly, accurately recounting the day's events?	Y		
Were all field forms completed and information accurately recorded?	Y		
• Field Sampling Forms	X		
• Chain of Custody Forms	Y		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	Y		

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/5/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/5/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 78° F Sunny and calm

Subcontractors Present Onsite: Trucking Company

Health and Safety Measures Necessary for Planned Activities: modified level D PPE required

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Excavation, Sampling of Grids 3, 4, 10, 11/5

Description of Chemical Data Acquisition Work Performed: Total PCB Sampling analysis, to include additional aroclors 1262 and 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: no problems Samples shipped via Fed ex to Mitkem lab, N. Kingston, R.I.

Chemical Parameter Measurement Problems: None

Contingency Sampling: None

Non-conformance Problems: None

Corrective Actions (including approvals): None

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/3/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date:

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	Y			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	Y			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	Y			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	Y			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

John wright

Date

8/5/13

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/5/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled, prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?
☒	☐	☐	Were chain-of-custody forms completed per SAP?
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?
☒	☐	☐	Were all destination laboratories notified of sample shipments?

Comments: _____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	John Wright		8/5/13
CQC Systems Manager	William Zaagsma		8-5-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.
	13STRE-3NW-104	8/5/13	11:20	G	SO		1			X	
	13STRE-4NW-105	8/5/13	11:25	G	SO		1			X	
	water blank							1			X
	13STRE-10WW-106	8/5/13	13:30	G	SO		1			X	
	13STRE-11/5NWW-107	8/5/13	13:55	G	SO		1			X	

Please hold pending results of 13TRE-11/5 NWW-101

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished	Received	Date	Time
[signature]	FED EX	8/5/13	14:00

Condition upon receipt: ☐ Ice ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 05AUG13
ActWgt: 20.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

TUE - 06 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7963 9015 9452

ED NCOA

02852
RI-US
PVD

51AG1/09B9/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796390159452
Ship date: 08/05/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

PCB SOIL SAMPLING - OU1 PROPERTIES

(67)

DATE	TIME	CDE-OU1-	135TRE-	DEPTH
8/05/13	11:20	3NW	104	6"
8/05/13	11:26	4NW	105	6"
8/05/13	13:30	10 WW	106	36"
8/05/13	13:55	11/5 NWWII	107	40"

"Life in the Rain"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 01450A-370

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
50	Final Sample #105 -135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #105 passed criteria for PCB's at 0.13 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
23-Aug-13 12:48

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1344
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M1344-02	CDE-OU1-135TRE-4NW-105	Soil	05-Aug-13 11:25	06-Aug-13 09:20
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-4
NW-105

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1344 Mod. Ref No.: SDG No.: SM1344

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1344-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H3081F.D/E4H3081R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 08/06/2013

Extraction: (Type) SONC Date Extracted: 08/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	130	
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1344 Mod. Ref No.: SDG No.: SM1344

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73062	105	101	92	88			0
02	LCS-73062	93	89	90	86			0
03	CDE-OU1-135T RE-4NW-105	75	74	68	67			0
04	CDE-OU1-135T RE-3NW-104	89	87	92	91			0
05	CDE-OU1-135T RE-10WW-106	93	87	95	92			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.08.22.A

Page 1 of 1 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/5/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	Y		
Were logbooks filled out properly, accurately recounting the day's events?	Y		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/5/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/5/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 78° F Sunny and calm

Subcontractors Present Onsite: Trucking Company

Health and Safety Measures Necessary for Planned Activities: modified level D PPE required

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Excavation, Sampling of Grids 3, 4, 10, 11/5

Description of Chemical Data Acquisition Work Performed: Total PCB Sampling analysis, to include additional aroclors 1262 and 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: no problems Samples shipped via Fed ex to Mitkem lab, N. Kingston, R.I.

Chemical Parameter Measurement Problems: None

Contingency Sampling: None

Non-conformance Problems: None

Corrective Actions (including approvals): None

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/3/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date:

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	Y			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	Y			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	Y			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	Y			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/5/13

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/5/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	John Wright	[signature]	8/5/13
CQC Systems Manager	William Zaragoza	[signature]	8-5-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.								
	13STRE-3NW-104	8/5/13	11:20	G	SO		1			X									
	13STRE-4NW-105	8/5/13	11:25	G	SO		1			X									
	water blank							1			X								
	13STRE-10WW-106	8/5/13	13:30	G	SO		1			X									
	13STRE-11/5NWW II-107	8/5/13	13:55	G	SO		1			X									

Please hold pending results of 13TRE-11/5NWW-101

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished	Received	Date	Time
[signature]	FED EX	8/5/13	14:00

Condition upon receipt: ☐ Cool ☐ Ambient ☐ Cold

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.spectrum-analytical.com

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280325

Ship Date: 05AUG13
ActWgt: 20.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 06 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7963 9015 9452
0201

ED NCOA

02852
RI-US
PVD

51AG1,0989/1A9E

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796390159452
Ship date: 08/05/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

PCB SOIL SAMPLING - OU1 PROPERTIES

(67)

DATE	TIME	CDE-OU1-	135TRE-	DEPTH
8/05/13	11:20	3NW	104	6"
8/05/13	11:26	4NW	105	6"
8/05/13	13:30	10WW	106	36"
8/05/13	13:55	11/5 NWWII	107	40"

"Rain the Rain"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 01450A-371

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
51	Final Sample #108- 110 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #108 passed criteria for PCB's at 0.16 ppm
Sample #109 passed criteria for PCB's at 0.10 ppm
Sample #110 passed criteria for PCB's at 0.11 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
26-Aug-13 13:37

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1350
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1350-01	CDE-OU1-135TRE-8WW-108	Soil	06-Aug-13 09:10	07-Aug-13 10:30
M1350-02	CDE-OU1-135TRE-8SW-109	Soil	06-Aug-13 09:15	07-Aug-13 10:30
M1350-03	CDE-OU1-135TRE-24SW-110	Soil	06-Aug-13 09:25	07-Aug-13 10:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LA100301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-8
WW-108

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1350 Mod. Ref No.: SDG No.: SM1350

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1350-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H3088F.D/E4H3088R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 08/07/2013

Extraction: (Type) SONC Date Extracted: 08/07/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	160	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-8
SW-109

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1350 Mod. Ref No.: SDG No.: SM1350

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1350-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H3089F.D/E4H3089R.D

% Moisture: 17 Decanted: (Y/N) N Date Received: 08/07/2013

Extraction: (Type) SONC Date Extracted: 08/07/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	100	P
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-2
4SW-110

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1350 Mod. Ref No.: SDG No.: SM1350

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1350-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H3090F.D/E4H3090R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 08/07/2013

Extraction: (Type) SONC Date Extracted: 08/07/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	110	
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1350 Mod. Ref No.: SDG No.: SM1350

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73089	96	95	90	86			0
02	LCS-73089	92	91	89	86			0
03	CDE-OU1-135T RE-8WW-108	72	72	59 *	65			1
04	CDE-OU1-135T RE-8SW-109	58	59	56 *	58 *			2
05	CDE-OU1-135T RE-24SW-110	70	70	59 *	63			1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

QC LIMITS
(34-147)
(60-125)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

som13.08.22.A

Page 1 of 1

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/6/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/6/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/6/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather:

Subcontractors Present Onsite: Trucking company

Health and Safety Measures Necessary for Planned Activities: modified level D PPE required

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Excavation, sampling of Grids 8, 24

Description of Chemical Data Acquisition Work Performed: Total PCB sampling analysis, to include additional aroclors 1262 and 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: No problems. Samples shipped via Fed Ex to Mitkem lab, N. Kingston, R.I.

Chemical Parameter Measurement Problems: None

Contingency Sampling: None

Non-conformance Problems: None

Corrective Actions (including approvals): None

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/6/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/6/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/6/13

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/6/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	John Wright		8/6/13
CQC Systems Manager			

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Analysis: Please see attached sheet

Containers

Lab Id:	Sample Id: (GDE-DUI-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.						
	135TRE-8WW-108	8/6/13	9:10	G	SO		1			X							
	135TRE-8SW-109	8/6/13	9:15	G	SO		1			X							
	135TRE-24SW-110	8/6/13	9:25	G	SO		1			X							
	Temp blank							1			X						

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ ERT ETSCHUDI@SEVENSON.COM

Relinquished by: Eric Tschudi — Date: 8/6/13 — Time: 15:30
Received by: FED EX
Relinquished by:
Received by:

Condition upon receipt: ☐ Good ☐ Cool ☐ Ambient

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 06AUG13
ActWgt: 20.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 07 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7964 0189 3609
0201

ED NCOA

02852
RI-US
PVD

51AG1/09B9/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796401893609
Ship date: 08/06/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

PCB SOIL SAMPLING - OU1 PROPERTIES

(67)

DATE	TIME	CDE-OU1-	135TRE-	DEPTH
8/05/13	11:20	3NW	104	6"
8/05/13	11:26	4NW	105	6"
8/05/13	13:30	10 WW	106	36"
8/05/13	13:55	11/5 NWWII	107	40"
8/06/13	9:10	8 WW	108	9"
8/06/13	9:15	8 SW	109	9"
8/06/13	9:25	24 SW	110	12"
8/07/13	8:00	8 FL	111	18"
8/07/13	8:05	15 FL	112	18"
8/07/13	8:07	15 WW	113	9"

"Rite in the Rain"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 09/10/2013	TRANSMITTAL NO. 01450A-372

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO: Environmental Residency US Army Corps of Engineers 214 State Highway 18 East Brunswick, NJ 08816	FROM: Sevenson Environmental Services 2749 Lockport Road Niagara Falls, NY 14305	CONTRACT NO. W912DQ-10-D-3006 0002	CHECK ONE: [X] THIS IS A NEW TRANSMITTAL [ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 01450A	PROJECT TITLE AND LOCATION 01-Main Register Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080		CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
52	Final Sample #111- 114 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #111 passed criteria for PCB's at 0.07 ppm
Sample #112 passed criteria for PCB's at 0.05 ppm
Sample #113 passed criteria for PCB's at 0.50 ppm
Sample #114 passed criteria for PCB's at 0.05 ppm
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
27-Aug-13 16:20

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1360
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1360-01	CDE-OU1-I35TRE-8FL-111	Soil	07-Aug-13 08:00	08-Aug-13 09:54
M1360-02	CDE-OU1-I35TRE-15FL-112	Soil	07-Aug-13 08:05	08-Aug-13 09:54
M1360-03	CDE-OU1-I35TRE-15WW-113	Soil	07-Aug-13 08:07	08-Aug-13 09:54
M1360-04	CDE-OU1-I35TRE-15/16WW-114	Soil	07-Aug-13 11:35	08-Aug-13 09:54
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-8
FL-111

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1360-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H3122F.D/E4H3122R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 08/08/2013

Extraction: (Type) SONC Date Extracted: 08/08/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/08/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	70	
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-1
5FL-112

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1360-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H3123F.D/E4H3123R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 08/08/2013

Extraction: (Type) SONC Date Extracted: 08/08/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/08/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	57	
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-1
5WW-113

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1360-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H3124F.D/E4H3124R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 08/08/2013

Extraction: (Type) SONC Date Extracted: 08/08/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/08/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	500	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-1
5/16WW-114

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1360-04A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H3125F.D/E4H3125R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 08/08/2013

Extraction: (Type) SONC Date Extracted: 08/08/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/08/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	56	
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73103	84	90	85	88			0
02	LCS-73103	83	87	87	89			0
03	CDE-OU1-135T RE-8FL-111	58	62	59 *	62			1
04	CDE-OU1-135T RE-15FL-112	63	68	65	68			0
05	CDE-OU1-135T RE-15WW-113	64	67	61	69			0
06	CDE-OU1-135T RE-15/16WW-114	69	72	72	74			0
07	CDE-OU1-135T RE-22SW-116	96	96	116	112			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.08.22.A

Page 1 of 1 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/7/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/7/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/7/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 77, overcast

Subcontractors Present Onsite: trucking company

Health and Safety Measures Necessary for Planned Activities: modified level D PPE required

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Excavation and sampling of grids 8, 15, and 22

Description of Chemical Data Acquisition Work Performed: total PCB sampling analysis, to include additional aroclors 1262 and 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: No problems Samples shipped via Fed Ex to Mitkem lab, N. Kingston, R.I.

Chemical Parameter Measurement Problems: None

Contingency Sampling: None

Non-conformance Problems: None

Corrective Actions (including approvals): None

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/7/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/7/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:_____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	John Wright		8/7/13
CQC Systems Manager			8-7-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
All TATs subject to laboratory approva
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: CDE-DUI-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.
	135TRE-8FL-111	8/7/13	8:00	G	SO		1			X	
	135TRE-15FL-112	8/7/13	8:05	G	SO		1			X	
	135TRE-15WW-113	8/7/13	8:07	G	SO		1			X	
	135TRE-15/16WW-114	8/7/13	11:35	G	SO		1			X	
	135TRE-22SW-116	8/7/13	13:53	G	SO		1			X	
	Temp Blank							1			1

Instrument Code below

Analyses

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ ETSCHUDI@SEVENSON.COM

Relinquished	Received	Date	Time
[signature]	FED EX	8/7/13	15:30

Condition upon receipt: ☐ Iced ☐ Ambient ☐ Cold

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280325

Ship Date: 07AUG13
ActWgt: 20.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 08 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7964 1357 2709
0201

ED NCOA

02852
RI-US
PVD

51AG1/09B9/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796413572709
Ship date: 08/07/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits. Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 01450A-373

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
53	Info Sample #116 -135 Tremont	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #116 failed criteria for PCB's at 10.00 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
27-Aug-13 16:20

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1360
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M1360-05	CDE-OU1-135TRE-22SW-116	Soil	07-Aug-13 13:53	08-Aug-13 09:54

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-135TRE-2
2SW-116

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1360-05A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H3142F.D/E4H3142R.D

% Moisture: 8.7 Decanted: (Y/N) N Date Received: 08/08/2013

Extraction: (Type) SONC Date Extracted: 08/08/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/09/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 100.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	3600	U
11104-28-2	Aroclor-1221	3600	U
11141-16-5	Aroclor-1232	3600	U
53469-21-9	Aroclor-1242	3600	U
12672-29-6	Aroclor-1248	3600	U
11097-69-1	Aroclor-1254	10000	
11096-82-5	Aroclor-1260	3600	U
37324-23-5	Aroclor-1262	3600	U
11100-14-4	Aroclor-1268	3600	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1360 Mod. Ref No.: SDG No.: SM1360

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73103	84	90	85	88			0
02	LCS-73103	83	87	87	89			0
03	CDE-OU1-135T RE-8FL-111	58	62	59 *	62			1
04	CDE-OU1-135T RE-15FL-112	63	68	65	68			0
05	CDE-OU1-135T RE-15WW-113	64	67	61	69			0
06	CDE-OU1-135T RE-15/16WW-114	69	72	72	74			0
07	CDE-OU1-135T RE-22SW-116	96	96	116	112			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

snm13.08.22.A

SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/7/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/7/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/7/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 77, overcast

Subcontractors Present Onsite: trucking company

Health and Safety Measures Necessary for Planned Activities: modified level D PPE required

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Excavation and sampling of grids 8, 15, and 22

Description of Chemical Data Acquisition Work Performed: total PCB sampling analysis, to include additional aroclors 1262 and 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: No problems Samples shipped via Fed Ex to Mitkem lab, N. Kingston, R.I.

Chemical Parameter Measurement Problems: None

Contingency Sampling: None

Non-conformance Problems: None

Corrective Actions (including approvals): None

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/7/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/7/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

N	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
N	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
N	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
N	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
N	☐	☐	Were chain-of-custody forms completed per SAP?	_____
N	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
N	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
N	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
N	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
N	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
N	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
N	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
N	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
N	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
N	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
N	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
N	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
N	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	John Wright	[illegible]	8/7/13
CQC Systems Manager	Wally Carlson	[illegible]	8-7-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9061 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

DISTINGUISHING COMMENTS BELOW

ANALYSIS REQUESTED

Lab Id:	Sample Id: GDE-DUI-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.							
	135TRE-8FL-111	8/7/13	8:00	G	SO		1			X								
	135TRE-15FL-112	8/7/13	8:05	G	SO		1			X								
	135TRE-15WW-113	8/7/13	8:07	G	SO		1			X								
	135TRE-15/16WW-114	8/7/13	11:35	G	SO		1			X								
	135TRE-22SW-116	8/7/13	13:53	G	SO		1			X								
	Temp Blank							1			1							

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ ETSCHUDI@SEVENSON.COM

Relinquished by:	Received by:	Date	Time
Eric Tschudi	FED EX	8/7/13	15:30

Sample Integrity: ☐ Intact ☐ Broken ☐ Leaking ☐ Other

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 07AUG13
ActWgt: 20.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 08 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7964 1357 2709
0201

ED NCOA

02852
RI-US
PVD

51AG1/09B9/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	Ship from:
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:

Tracking no.: 796413572709
Ship date: 08/07/2013
Estimated shipping charges: 0.00

Package Information

Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:

Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, eg., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 01450A-374

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
54	Final Sample #117 -135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #117 passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
28-Aug-13 15:53

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: M1370
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1370-01	CDE-OU1-135TRE-9/10WW-117	Soil	08-Aug-13 09:45	09-Aug-13 08:47

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-9 /10WW-117

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1370 Mod. Ref No.: SDG No.: SM1370

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1370-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2M2467F.D/E2M2467R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 08/09/2013

Extraction: (Type) SONC Date Extracted: 08/12/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/12/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1370 Mod. Ref No.: SDG No.: SM1370

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73130	85	92	79	90			0
02	LCS-73130	86	92	85	92			0
03	CDE-OU1-135TRE-9/10WW-117	76	82	75	82			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.08.22.A

Page 1 of 1 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/8/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/8/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/8/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 77°F, cloudy and humid

Subcontractors Present Onsite: Trucking company

Health and Safety Measures Necessary for Planned Activities: modified level D PPE required

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Excavation, sampling of grid 9/10.

Description of Chemical Data Acquisition Work Performed: Total PCB sampling analysis, to include additional aroclors 1262 and 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: No problems Samples shipped via Fed Ex to Mitkem lab, N. Kingston, R.I.

Chemical Parameter Measurement Problems: None

Contingency Sampling: None

Non-conformance Problems: None

Corrective Actions (including approvals): None

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/8/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/8/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	Y			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	Y			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	Y			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

John Wright

Date

8/8/13

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: _____

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

_____

_____

_____

	Name	Signature	Date
Sevenson Project Manager			
QC Reviewer	John Wright		8/8/13
CQC Systems Manager	William Zambrano		8/8/13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Lab Id:	Sample Id: CDE-DU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.								Notes
	135TRE-9 #/10WW-117	8/8/13	9:45	G	SO		1			X									
	Temp Blank							1			1								

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMT~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	8/8/13	15:30

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 08AUG13
ActWgt: 20.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400
BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 09 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7964 2293 5916

ED NCOA

02852
RI-US
PVD

51AG1/09B9/1ASE

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx.Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796422935916
Ship date: 08/08/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 01450A-375

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
55	Final Sample #118- 125 - 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #118 passed criteria for PCB's at 0 ppm - Non-detected, Sample #119 passed criteria for PCB's at 0 ppm - Non-detected
Sample #120 passed criteria for PCB's at 0 ppm - Non-detected, Sample #121 passed criteria for PCB's at 0 ppm - Non-detected
Sample #122 passed criteria for PCB's at 0.052 ppm, Sample #123 passed criteria for PCB's at 0 ppm - Non-detected
Sample #124 passed criteria for PCB's at 0 ppm - Non-detected
Sample #125 passed criteria for PCB's at 0 ppm - Non-detected
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
04-Sep-13 09:47

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1425
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1425-01	CDE-OU1-135TRE-19NW-118	Soil	14-Aug-13 10:45	15-Aug-13 10:15
M1425-02	CDE-OU1-135TRE-19SW-119	Soil	14-Aug-13 10:50	15-Aug-13 10:15
M1425-03	CDE-OU1-135TRE-19WW-120	Soil	14-Aug-13 10:55	15-Aug-13 10:15
M1425-04	CDE-OU1-135TRE-19FL-121	Soil	14-Aug-13 11:00	15-Aug-13 10:15
M1425-05	CDE-OU1-135TRE-20NW-122	Soil	14-Aug-13 11:05	15-Aug-13 10:15
M1425-06	CDE-OU1-135TRE-20SW-123	Soil	14-Aug-13 11:10	15-Aug-13 10:15
M1425-07	CDE-OU1-135TRE-20FL-124	Soil	14-Aug-13 11:15	15-Aug-13 10:15
M1425-08	CDE-OU1-135TRE-21SW-125	Soil	14-Aug-13 11:20	15-Aug-13 10:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
9NW-118

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1425-01A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H3327F.D/E4H3327R.D

% Moisture: 19 Decanted: (Y/N) N Date Received: 08/15/2013

Extraction: (Type) SONC Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
9SW-119

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1425-02A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E4H3328F.D/E4H3328R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 08/15/2013

Extraction: (Type) SONC Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	41	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	36	J
11096-82-5	Aroclor-1260	41	U
37324-23-5	Aroclor-1262	41	U
11100-14-4	Aroclor-1268	41	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
9WW-120

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: M1425

Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: M1425-03A

Sample wt/vol: 30.3 (g/mL) G

Lab File ID: E4H3329F.D/E4H3329R.D

% Moisture: 18 Decanted: (Y/N) N

Date Received: 08/15/2013

Extraction: (Type) SONC

Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	21	J
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-1
9FL-121

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1425-04A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H3330F.D/E4H3330R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 08/15/2013

Extraction: (Type) SONC Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
0NW-122

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1425-05A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H3331F.D/E4H3331R.D

% Moisture: 23 Decanted: (Y/N) N Date Received: 08/15/2013

Extraction: (Type) SONC Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	52	
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
0SW-123

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1425-06A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H3332F.D/E4H3332R.D

% Moisture: 23 Decanted: (Y/N) N Date Received: 08/15/2013

Extraction: (Type) SONC Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	28	J
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
OFL-124

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1425-07A

Sample wt/vol: 30.7 (g/mL) G Lab File ID: E4H3333F.D/E4H3333R.D

% Moisture: 29 Decanted: (Y/N) N Date Received: 08/15/2013

Extraction: (Type) SONC Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	45	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U
37324-23-5	Aroclor-1262	45	U
11100-14-4	Aroclor-1268	45	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-135TRE-2
1SW-125

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: M1425

Mod. Ref No.: SDG No.: SM1425

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: M1425-08A

Sample wt/vol: 30.3 (g/mL) G

Lab File ID: E4H3334F.D/E4H3334R.D

% Moisture: 17 Decanted: (Y/N) N

Date Received: 08/15/2013

Extraction: (Type) SONC

Date Extracted: 08/15/2013

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 08/16/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1425 Mod. Ref No.: SDG No.: SM1425

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73203	73	87	74	88			0
02	LCS-73203	75	91	74	88			0
03	CDE-OU1-135T RE-19NW-118	47	56	53 *	65			1
04	CDE-OU1-135T RE-19SW-119	56	68	55 *	67			1
05	CDE-OU1-135T RE-19WW-120	54	67	53 *	65			1
06	CDE-OU1-135T RE-19FL-121	66	80	63	76			0
07	CDE-OU1-135T RE-20NW-122	62	76	61	73			0
08	CDE-OU1-135T RE-20SW-123	63	76	61	73			0
09	CDE-OU1-135T RE-20FL-124	59	71	62	73			0
10	CDE-OU1-135T RE-21SW-125	56	67	55 *	65			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.08.22.A

Page 1 of 1 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/14/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/14/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/14/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY - 64°F - 58% HUMIDITY, WIND: WEST 5-7 MPH.

Subcontractors Present Onsite: NONE.

Health and Safety Measures Necessary for Planned Activities: LEVEL D AND MODIFIED LEVEL D PPE WITHIN EXCLUSION ZONE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION + SAMPLING OF GRIDS 19, 20 + 21, FLOORS AND SIDEWALLS.

Description of Chemical Data Acquisition Work Performed: SAMPLE ANALYSIS INCLUDES: TOTAL PCBs PLUS ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NONE. SAMPLES SHIPPED OVERNIGHT VIA FEDEX TO MITKEM'S N. KINGSTON LAB. FEDEX SHIPPING DOCUMENTATION ATTACHED TO THIS REPORT.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NOT AT THIS TIME

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

8/14/13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/14/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? – EMAILED, NOT FAX	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/14/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/14/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☑	☐	☐	Has a Preparatory Phase meeting been conducted?	
☑	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		8/14/13
CQC Systems Manager			8-14-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 7695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below

Lab Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP.								
	135TRE-19NW-118	8/14/13	1045	G	SO		1			X									
	135TRE-19SW-119	8/14/13	1050	G	SO		1			X									
	135TRE-19WW-120	8/14/13	1055	G	SO		1			X									
	135TRE-19FL-121	8/14/13	1100	G	SO		1			X									
	135TRE-20NW-122	8/14/13	1105	G	SO		1			X									
	135TRE-20SW-123	8/14/13	1110	G	SO		1			X									
	135TRE-20FL-124	8/14/13	1115	G	SO		1			X									
	135TRE-21SW-125	8/14/13	1120	G	SO		1			X									
	TEMPERATURE										X								

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EDD Format~~ ~~EMT~~ ETSCHUDI@SEVENSON.COM

Relinquished by:	Received by:	Date	Time
[signature]	FED EX	8/14/13	1600

Condition upon receipt: ☐ Iced ☐ Ambient ☐ C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 14AUG13
ActWgt: 25.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Comell
Dept #

THU - 15 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 7964 6261 2531
0201

ED NCOA

02852
RI-US
PVD

51AG1/09E9/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796462612531
Ship date: 08/14/2013
Estimated shipping charges: 0.00

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

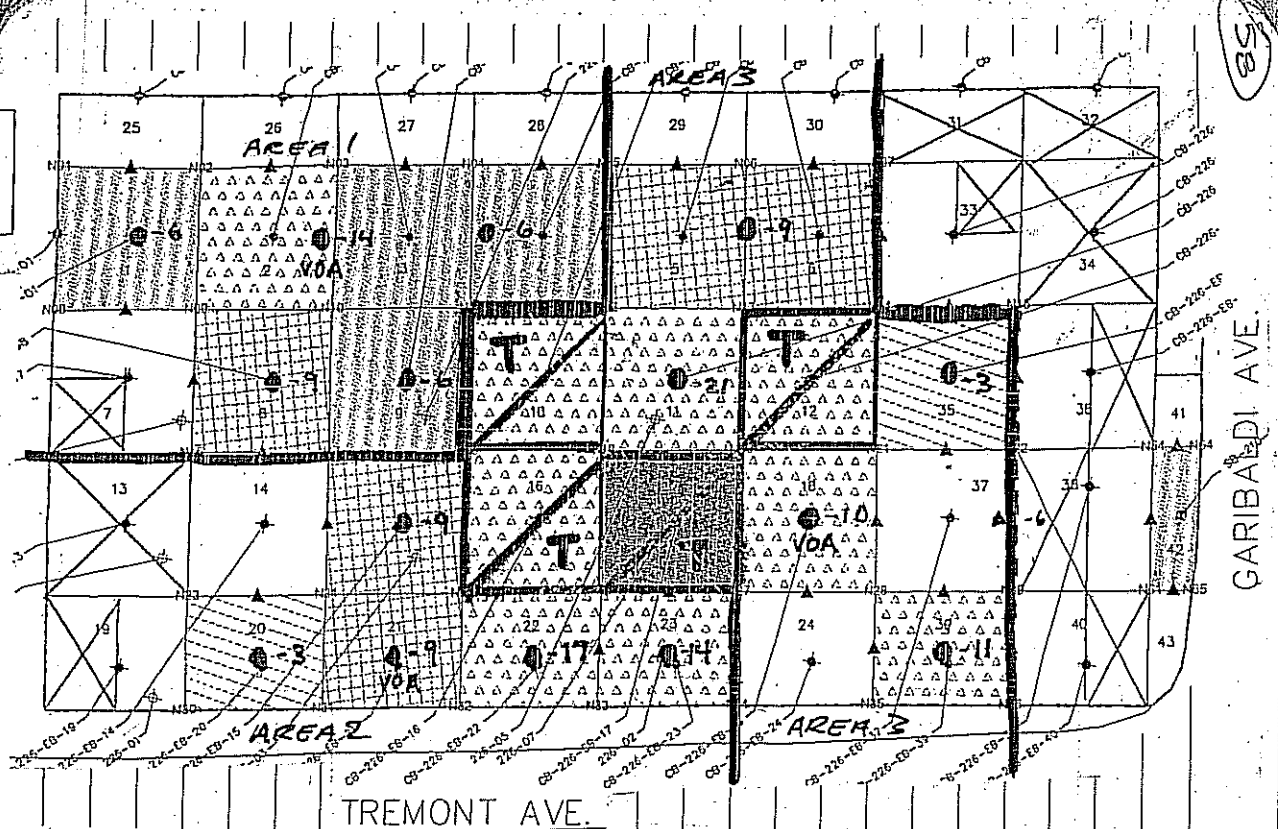
Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

PCB SOIL SAMPLING - OUI PROPERTIES

DATE	TIME	CDE-OUI-135TRF-			DEPTH	(67)
8/05/13	11:20	3NW	104	(M1344)	6"	PRE 5.0 / 5.0
8/05/13	11:25	4NW	105		6"	PRE 0.130 / 0.130
8/05/13	13:30	10 WW	106		36"	PRE 5.0 / 5.2
~~8/05/13~~	~~13:55~~	~~11/5 NWWII~~	~~107~~		~~40"~~	(20)
8/06/13	9:10	8 WW	108	(M1350)	9"	0.160
8/06/13	9:15	8 SW	109		9"	0.100
8/06/13	9:25	24 SW	110		12"	0.110
8/07/13	8:00	8 FL	111	(M1360)	18"	PRE 0.070 /
8/07/13	8:05	15 FL	112		18"	PRE 0.057 /
8/07/13	8:07	15 WW	113		9"	PRE 0.800 /
8/07/13	11:35	15/16 WW	114		40"	PRE 0.056 /
~~8/07/13~~	~~13:50~~	~~22 FL~~	~~115~~			~~SW~~
8/07/13	13:53	22 SW	116		18"	PRE 7.3 /
~~8/08/13~~	~~9:45~~	~~9/10 WW~~	~~117~~		~~36"~~	ND
8/14/13	1045	19 NW -	118		6"	
8/14/13	1050	19 SW -	119		6"	
8/14/13	1055	19 WW -	120		6"	
8/14/13	1100	19 FL -	121		14"	
8/14/13	1105	20 NW -	122		6"	
8/14/13	1110	20 SW -	123		6"	
8/14/13	1115	20 FL -	124		14"	
8/14/13	1120	21 SW -	125		10"	

"Life in the Rain"


AREA 1
AREA 2
AREA 3
AREA 4
GARAGE
TREMONT AVE.
GARIBALDI AVE.
VOA

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/24/2013

TRANSMITTAL NO.: 01450A-406

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

O: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

PECIFICATION SEC. NO. (Cover only one section with each ansmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
6	Final Sample #126- 130- 135 Tremont Ave	TEST REPORTS	2	1.4		A	N	

EMARKS
ample #126 passed criteria for PCB's at 0.120 ppm,
ample #127 passed criteria for PCB's at 0.084 ppm,
ample #128 passed criteria for PCB's at 0.720 ppm,
ample #129 passed criteria for PCB's at 0.670 ppm,
ample #130 passed criteria for PCB's at 0.110 ppm,
he criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

NCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
04-Sep-13 15:41

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M1445
Project: Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M1445-01	CDE-OU1-22SWEXT-126	Soil	14-Aug-13 15:00	16-Aug-13 10:00
M1445-02	CDE-OU1-22EWEXT-127	Soil	15-Aug-13 10:15	16-Aug-13 10:00
M1445-03	CDE-OU1-22WWEXT-128	Soil	15-Aug-13 10:20	16-Aug-13 10:00
M1445-04	CDE-OU1-27EW-129	Soil	15-Aug-13 10:25	16-Aug-13 10:00
M1445-05	CDE-OU1-27WW-130	Soil	15-Aug-13 10:30	16-Aug-13 10:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-22SWEXT-126

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1445 Mod. Ref No.: SDG No.: SM1445

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1445-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H3556F.D/E4H3556R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 08/16/2013

Extraction: (Type) SONC Date Extracted: 08/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/21/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.[1]	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	120	P
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-22EWEXT-127

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1445 Mod. Ref No.: SDG No.: SM1445

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1445-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H3557F.D/E4H3557R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 08/16/2013

Extraction: (Type) SONC Date Extracted: 08/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/21/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	84	P
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-22WWEXT-128

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1445 Mod. Ref No.: SDG No.: SM1445

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1445-03A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H3558F.D/E4H3558R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 08/16/2013

Extraction: (Type) SONC Date Extracted: 08/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/21/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	720	P
11096-82-5	Aroclor-1260	190	U
37324-23-5	Aroclor-1262	190	U
11100-14-4	Aroclor-1268	190	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-27EW-129

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1445 Mod. Ref No.: SDG No.: SM1445

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1445-04A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H3559F.D/E4H3559R.D

% Moisture: 21 Decanted: (Y/N) N Date Received: 08/16/2013

Extraction: (Type) SONC Date Extracted: 08/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/21/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	670	
11096-82-5	Aroclor-1260	210	U
37324-23-5	Aroclor-1262	210	U
11100-14-4	Aroclor-1268	210	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-27WW-130

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1445 Mod. Ref No.: SDG No.: SM1445

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M1445-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H3560F.D/E4H3560R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 08/16/2013

Extraction: (Type) SONC Date Extracted: 08/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/21/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	110	P
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M1445 Mod. Ref No.: SDG No.: SM1445

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-73222	79	81	80	84			0
02	LCS-73222	70	72	83	87			0
03	CDE-OU1-22SW EXT-126	70	72	67	71			0
04	CDE-OU1-22EW EXT-127	64	65	64	65			0
05	CDE-OU1-22WW EXT-128	64	63	67	70			0
06	CDE-OU1-27EW -129	77	76	79	83			0
07	CDE-OU1-27WW -130	60	44	62	59 *			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.08.22.A

Page 1 of 1 SW846

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/15/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/15/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 8/15/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 75-79°F. PARTLY CLOUDY. WIND: NW 7-12MPH.

Subcontractors Present Onsite: NONE.

Health and Safety Measures Necessary for Planned Activities: ALL WORK PERFORMED UNDER LEVEL D, OR MODIFIED LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: EXCAVATION ~~LOT~~ AND SAMPLING WITHIN GRIDS 22 AND 27. COLLECTED SOUTH, EAST AND WEST SIDEWALL SAMPLES IN GRID 22. COLLECT EAST AND WEST SIDEWALL SAMPLES IN GRID 27.

Description of Chemical Data Acquisition Work Performed: SAMPLES TO BE ANALYZED FOR TOTAL PCBs, TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SOIL SAMPLES SHIPPED TO MITCHEM LABS OVERNIGHT VIA FED EX. SEE ATTACHED FED EX AIR BILL.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NOT AT THIS TIME.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 8/15/13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/15/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? – SCANNED + EMAILED, NOT FAXED.	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

8/15/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 8/15/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☒ **INITIAL PHASE** OR ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

_____

_____

_____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		8/15/13
CQC Systems Manager			8-15-13

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 24 HOUR
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ 07080
908 769 5301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G278-9001 RQN:

Project No.: G 278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): ERIC TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-DUI-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1265	TEMP								
	135TRE-22SWEXT-126	8/14/13	1500	G	SO		1			X									
	135TRE-22EWEXT-127	8/15/13	1015	G	SO		1			X									
	135TRE-22WWEXT-128	8/15/13	1020	G	SO		1			X									
	135TRE-27EW-129	8/15/13	1025	G	SO		1			X									
	135TRE-27WW-130	8/15/13	1030	G	SO		1			X									
	TEMP BLANK									X	X								

Contaminated: ☐ Yes ☐ No

Is Preservative Checked Below: ☐ Yes ☐ No

Analysis:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

☒ E-mail to KLICKFIELD@SEVENSON.COM
~~EMAIL~~ ETSCHUDI@SEVENSON.COM
~~EDD Format~~

Relinquished By:	Received By:	Date:	Time:
[signature]	FED EX	8/15/13	1600

Condition upon Receipt: ☐ Iced ☐ Ambient ☐ °C

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201305280326

Ship Date: 15AUG13
ActWgt: 25.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 16 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7964 7078 1197

ED NCOA

02852
RI-US
PVD

51AG1/09B9/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796470781197
Ship date: 08/15/2013
Estimated shipping charges: 0.00

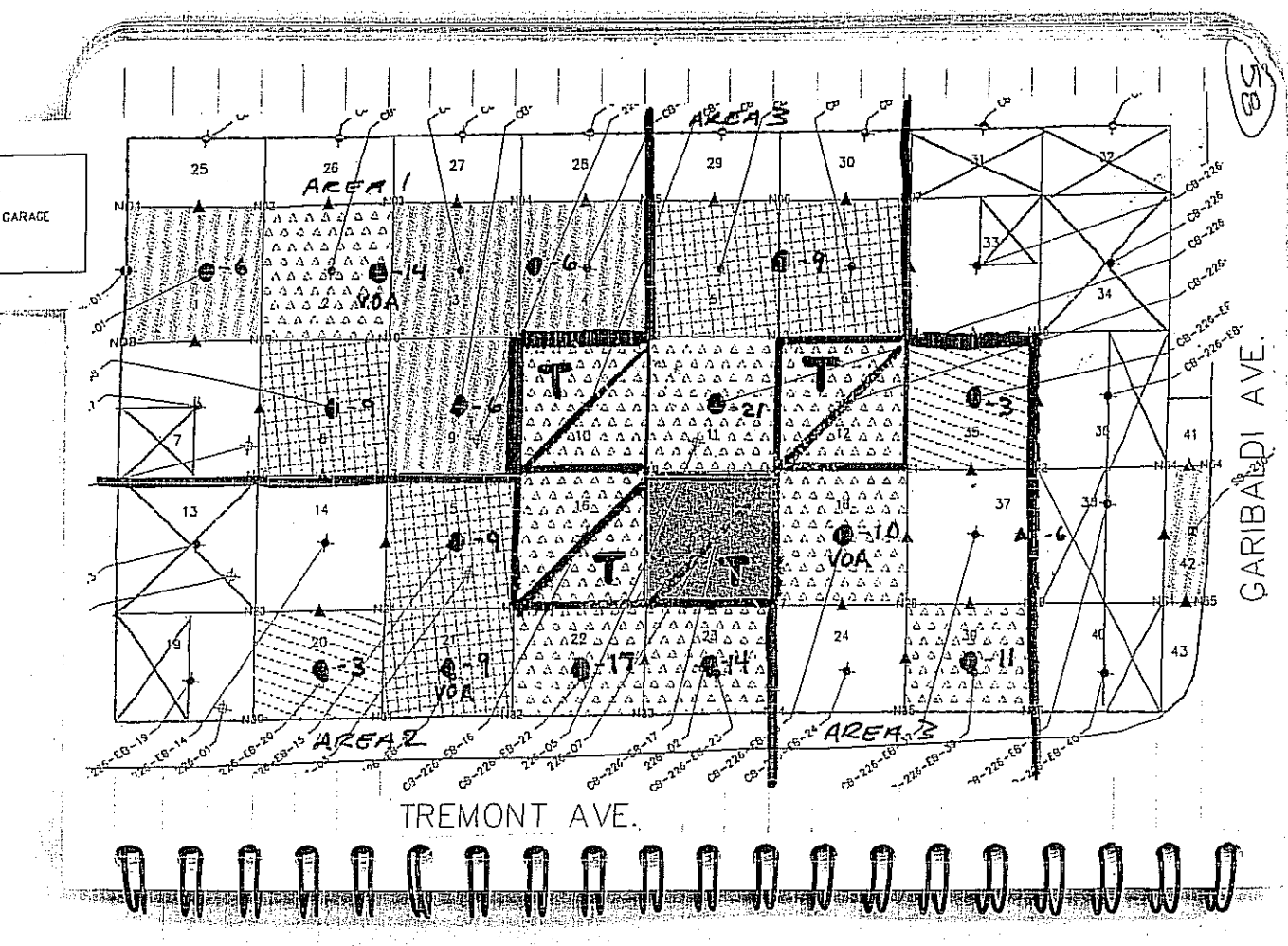
Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.


GARAGE
AREA 1
AREA 2
AREA 3
AREA 5
VOA
GARIBALDI AVE.
TREMONT AVE.

PCB SOIL SAMPLING - OU1 PROPERTIES

67

DATE	TIME	CDE-OU1-135TRE-		DEPTH	
8/05/13	11:20	3NW 104	(M1344)	6"	PRE 5.0/5.0
8/05/13	11:25	4NW 105		6"	PRE 0.130/0.130
8/05/13	13:30	10 WW 106		36"	PRE 5.0/5.2
~~8/05/13~~	~~13:55~~	~~11/5 NWW II 107~~		~~40"~~	20
8/06/13	9:10	8 WW 108	(M1350)	9"	0.160
8/06/13	9:15	8 SW 109		9"	0.100
8/06/13	9:25	24 SW 110		12"	0.110
8/07/13	8:00	8 FL 111	(M1360)	18"	PRE 0.070/
8/07/13	8:05	15 FL 112		18"	PRE 0.057/
8/07/13	8:07	15 WW 113		9"	PRE 0.500/
8/07/13	11:35	15/16 WW 114		40"	PRE 0.056/
~~8/07/13~~	~~13:50~~	~~22 FL 115~~			SW
8/07/13	13:53	22 SW 116		18"	PRE 7.3/
8/06/13	9:45	9/10 WW 117		36"	ND
8/14/13	1045	19 NW-118		6"	
8/14/13	1050	19 SW-119		6"	
8/14/13	1055	19 WW-120		6"	
8/14/13	1100	19 FL-121		14"	
8/14/13	1105	20 NW-122		6"	
8/14/13	1110	20 SW-123		6"	
8/14/13	1115	20 FL-124		14"	
8/14/13	1120	21 SW-125		10"	
8/14/13	1500	22 SW EXT-126		20 ~~12~~"	
8/15/13	1015	22 EW EXT 127		20 ~~12~~"	
8/15/13	1020	22 WW EXT 128		20 ~~12~~"	

68

PCB SOIL SAMPLING DUI PROPERTIES

DATE	TIME	SAMPLE CODE (CDE-DUI-13STREET)	DEPTH	P/F
8/15/13	1025	27EW-129	6"	
8/15/13	1030	27WW-130	6"	

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/05/2013

TRANSMITTAL NO.: 01450A-453

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
57	Waste Deter-New Market ROW Non-TSCA Haz	TEST REPORTS	2	1.4		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **Sample ID(s) CDE-OU1-NMROW-143**

Prepared By: **Ken Paisley**

CC: **Kim Lickfield**

Date: **11/05/13**

Waste Determination (if applicable): Non-RCRA/Non-TSCA Hazardous

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to general guidance provided in 40 CFR 261, Identification and Listing of Hazardous Wastes, for hazardous waste determination. (http://www.epa.gov/epawaste/hazard/wastetypes/characteristic.htm).

The analyses performed are of acceptable data quality.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that the wastestream represented by this analysis will be managed as follows:

Disposal Facility(ies) – Gloucester County Improvement Authority and/or Rolling Hills Landfill
Waste Classification – Non-Hazardous

This waste management decision is based upon the definitions of hazardous waste as defined in 40 CFR 261.20 to 261.24 and/or 40 CFR 761. Furthermore, based on generator's knowledge of site processes, the waste is not a listed hazardous waste per 40 CFR 261.30 to 261.34.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143
Lab ID: M2081-01
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method							**SW1010_S**
Ignitability	> 140			°F	1	10/29/2013 16:00	R77633

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143
Lab ID: M2081-01
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.3		1.0	S.U.	1	10/31/2013 16:30	R77695

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/04/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143
Lab ID: M2081-01
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes							**SW7.3.3.2_S**
Reactive Cyanide	ND		1.1	mg/Kg	1	10/30/2013 14:33	74500
SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes							**SW7.3.4.2_S**
Reactive Sulfide	11		1.1	mg/Kg	1	10/28/2013 19:55	74499

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: M2081-01 **Collection Date:** 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Arsenic -- TCLP	ND		20	ug/L	1	11/01/2013 10:57	74548
Barium -- TCLP	470		200	ug/L	1	11/01/2013 10:57	74548
Cadmium -- TCLP	12		5.0	ug/L	1	11/01/2013 10:57	74548
Chromium -- TCLP	1.7	J	20	ug/L	1	11/01/2013 10:57	74548
Lead -- TCLP	79		10	ug/L	1	11/01/2013 10:57	74548
Selenium -- TCLP	ND		30	ug/L	1	11/01/2013 10:57	74548
Silver -- TCLP	ND		30	ug/L	1	11/01/2013 10:57	74548
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury -- TCLP	ND		0.20	µg/L	1	11/01/2013 14:24	74556

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143
Lab ID: M2081-01
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_W**
Vinyl Chloride -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
2-Butanone -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Chloroform -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Carbon Tetrachloride -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Benzene -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Trichloroethene -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	10/30/2013 15:33	74524
Surrogate: Dibromofluoromethane -- TCLP	99.9		85-115	%REC	1	10/30/2013 15:33	74524
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	101		70-120	%REC	1	10/30/2013 15:33	74524
Surrogate: Toluene-d8 -- TCLP	99.2		85-120	%REC	1	10/30/2013 15:33	74524
Surrogate: Bromofluorobenzene -- TCLP	99.6		75-120	%REC	1	10/30/2013 15:33	74524

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: M2081-01 **Collection Date:** 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_W**
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
2-Methylphenol -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
4-Methylphenol -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
Hexachloroethane -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
Nitrobenzene -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	10/30/2013 14:32	74502
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	10/30/2013 14:32	74502
Pentachlorophenol -- TCLP	ND		67	ug/L	1	10/30/2013 14:32	74502
Pyridine -- TCLP	ND		67	ug/L	1	10/30/2013 14:32	74502
Surrogate: Nitrobenzene-d5 -- TCLP	80.0		40-110	%REC	1	10/30/2013 14:32	74502
Surrogate: 2-Fluorobiphenyl -- TCLP	76.7		50-110	%REC	1	10/30/2013 14:32	74502
Surrogate: Terphenyl-d14 -- TCLP	83.6		50-135	%REC	1	10/30/2013 14:32	74502
Surrogate: Phenol-d5 -- TCLP	36.2		10-115	%REC	1	10/30/2013 14:32	74502
Surrogate: 2-Fluorophenol -- TCLP	45.6		20-110	%REC	1	10/30/2013 14:32	74502
Surrogate: 2,4,6-Tribromophenol -- TCLP	60.6		40-125	%REC	1	10/30/2013 14:32	74502

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143 **Project:** Cornell Dubilier Superfund Site OU1
Lab ID: M2081-01 **Collection Date:** 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_W**
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	10/29/2013 15:33	74503
Heptachlor -- TCLP	ND		0.17	ug/L	1	10/29/2013 15:33	74503
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	10/29/2013 15:33	74503
Endrin -- TCLP	ND		0.33	ug/L	1	10/29/2013 15:33	74503
Methoxychlor -- TCLP	ND		1.7	ug/L	1	10/29/2013 15:33	74503
Toxaphene -- TCLP	ND		17	ug/L	1	10/29/2013 15:33	74503
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	10/29/2013 15:33	74503
Surrogate: Tetrachloro-m-xylene -- TCLP	65.2		25-140	%REC	1	10/29/2013 15:33	74503
Surrogate: Decachlorobiphenyl -- TCLP	43.4		30-135	%REC	1	10/29/2013 15:33	74503

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/01/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143
Lab ID: M2081-01
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8151A -- Chlorinated Herbicides by GC-ECD							**SW8151_W**
2,4-D – TCLP	ND		3.3	µg/L	1	10/31/2013 11:01	74504
2,4,5-TP (Silvex) – TCLP	ND		0.33	µg/L	1	10/31/2013 11:01	74504
Surrogate: DCAA – TCLP	21.8	S	23-139	%REC	1	10/31/2013 11:01	74504

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/04/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: CDE-OU1-NMROW-143
Lab ID: M2081-01
Project: Cornell Dubilier Superfund Site OU1
Collection Date: 10/24/13 15:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1221	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1232	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1242	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1248	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1254	5300		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1260	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1262	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Aroclor-1268	ND		1400	ug/Kg	40	10/30/2013 12:07	74488
Surrogate: Tetrachloro-m-xylene	0	S	34-147	%REC	40	10/30/2013 12:07	74488
Surrogate: Decachlorobiphenyl	0	S	60-125	%REC	40	10/30/2013 12:07	74488

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-462

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
58	Final Sample NM1#131 & 133 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #131 passed criteria for PCB's at ND
Sample #133 passed criteria for PCB's at ND
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

J W CAMPBELL

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
12-Nov-13 15:14

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: M2034
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Eric Tschudi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2034-01	CDE-OU1-NM1-A12-131	Soil	21-Oct-13 14:00	22-Oct-13 08:30
M2034-02	CDE-OU1-NM1-B12-133	Soil	21-Oct-13 14:30	22-Oct-13 08:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2034

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: changed fax due date.

Case:
SDG:
PO: G2789024

HC Due: 11/08/13
Fax Due: 10/23/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2034-01A	CDE-OU1-NM1-A12-131	10/21/2013 14:00	10/22/2013	Soil	PMoist	/					B1
M2034-01A	CDE-OU1-NM1-A12-131	10/21/2013 14:00	10/22/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B1
M2034-02A	CDE-OU1-NM1-B12-133	10/21/2013 14:30	10/22/2013	Soil	PMoist	/					B1
M2034-02A	CDE-OU1-NM1-B12-133	10/21/2013 14:30	10/22/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

10/22/2013 17:11

Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2034

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-A12-131 (M2034-01A), recovery is below criteria for Decachlorobiphenyl on rear column at 58% with criteria of (60-125) and Decachlorobiphenyl on front column at 52% with criteria of (60-125).

CDE-OU1-NM1-B12-133 (M2034-02A), recovery is below criteria for Decachlorobiphenyl on front column at 54% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of

interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/12/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-A12-131

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2034-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H5547F.D/E4H5547R.D

% Moisture: 9.5 Decanted: (Y/N) N Date Received: 10/22/2013

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-B12-133

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2034-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H5548F.D/E4H5548R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 10/22/2013

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U
37324-23-5	Aroclor-1262	39	U
11100-14-4	Aroclor-1268	39	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74415

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74415

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5544F.D/E4H5544R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74415(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74415

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5545F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	72	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	81	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74415(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74415

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5545R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	79	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	90	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74415(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74415

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5546F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	80	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	82	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74415(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74415

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5546R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/22/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	88	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	92	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74415	60	63	62	68			0
02	LCS-74415	51	54	62	69			0
03	LCSD-74415	61	64	63	69			0
04	CDE-OU1-NM1-A12-131	51	53	52 *	58 *			2
05	CDE-OU1-NM1-B12-133	46	47	54 *	60			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74415

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Lab Sample ID: LCS-74415 LCS Lot No.: A072217

Date Extracted: 10/22/2013 Date Analyzed (1): 10/22/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	72.2825	54		40-140
Aroclor-1260	133.3330	81.1031	61		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/22/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	78.8291	59		40-140
Aroclor-1260	133.3330	90.2172	68		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-74415

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Lab Sample ID: LCSD-74415 LCS Lot No.: A072217

Date Extracted: 10/22/2013 Date Analyzed (1): 10/22/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	79.8990	60		40-140	11		30
Aroclor-1260	133.3330	82.1250	62		60-130	2.0		30

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/22/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	87.6126	66		40-140	11		30
Aroclor-1260	133.3330	92.1060	69		60-130	1.0		30

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

RPD: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74415

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

Lab File ID: E4H5544F.D / E4H5544R.D Lab Sample ID: MB-74415

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 10/22/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 10/22/2013 Date Analyzed (2): 10/22/2013

Time Analyzed (1): 16:58 Time Analyzed (2): 16:58

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74415	LCS-74415	10/22/2013	10/22/2013
02	LCSD-74415	LCSD-74415	10/22/2013	10/22/2013
03	CDE-OU1-NM1-A12-131	M2034-01A	10/22/2013	10/22/2013
04	CDE-OU1-NM1-B12-133	M2034-02A	10/22/2013	10/22/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.263 DCB: 9.719

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213L4	E4H5307F.D	10/15/2013	11:55	3.266	9.722
02	AR12323L4	E4H5308F.D	10/15/2013	12:13	3.266	9.721
03	AR12421L4	E4H5309F.D	10/15/2013	12:31	3.265	9.721
04	AR12426L4	E4H5310F.D	10/15/2013	12:50	3.265	9.720
05	AR12422L4	E4H5311F.D	10/15/2013	13:08	3.265	9.719
06	AR12423L4	E4H5312F.D	10/15/2013	13:26	3.264	9.720
07	AR12424L4	E4H5313F.D	10/15/2013	13:44	3.265	9.720
08	AR12425L4	E4H5314F.D	10/15/2013	14:02	3.264	9.720
09	AR12481L4	E4H5315F.D	10/15/2013	14:20	3.265	9.720
10	AR12486L4	E4H5316F.D	10/15/2013	14:38	3.265	9.720
11	AR12482L4	E4H5317F.D	10/15/2013	14:57	3.265	9.719
12	AR12483L4	E4H5318F.D	10/15/2013	15:15	3.264	9.719
13	AR12484L4	E4H5319F.D	10/15/2013	15:33	3.264	9.720
14	AR12485L4	E4H5320F.D	10/15/2013	15:51	3.264	9.720
15	AR12541L4	E4H5321F.D	10/15/2013	16:10	3.264	9.720
16	AR12546L4	E4H5322F.D	10/15/2013	16:29	3.264	9.721
17	AR12542L4	E4H5323F.D	10/15/2013	16:47	3.263	9.720
18	AR12543L4	E4H5324F.D	10/15/2013	17:05	3.264	9.720
19	AR12544L4	E4H5325F.D	10/15/2013	17:23	3.264	9.720
20	AR12545L4	E4H5326F.D	10/15/2013	17:41	3.263	9.718
21	AR12623L4	E4H5327F.D	10/15/2013	17:59	3.265	9.720
22	AR12683L4	E4H5328F.D	10/15/2013	18:17	3.264	9.719
23	AR16601L4	E4H5329F.D	10/15/2013	18:36	3.263	9.719
24	AR16606L4	E4H5330F.D	10/15/2013	18:54	3.263	9.717
25	AR16602L4	E4H5331F.D	10/15/2013	19:12	3.263	9.720
26	AR16603L4	E4H5332F.D	10/15/2013	19:30	3.264	9.719
27	AR16604L4	E4H5333F.D	10/15/2013	19:48	3.263	9.719

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.263 DCB: 9.719

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605L4	E4H5334F.D	10/15/2013	20:06	3.263	9.719
29	AR16603LT	E4H5540F.D	10/22/2013	15:45	3.261	9.716
30	MB-74415	E4H5544F.D	10/22/2013	16:58	3.261	9.713
31	LCS-74415	E4H5545F.D	10/22/2013	17:16	3.261	9.714
32	LCSD-74415	E4H5546F.D	10/22/2013	17:34	3.261	9.713
33	CDE-OU1-NM1-A12-131	E4H5547F.D	10/22/2013	17:52	3.260	9.714
34	CDE-OU1-NM1-B12-133	E4H5548F.D	10/22/2013	18:10	3.261	9.713
35	AR16603LU	E4H5554F.D	10/22/2013	19:59	3.261	9.713

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.982 DCB: 12.139

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213L4	E4H5307R.D	10/15/2013	11:55	3.985	12.137
02	AR12323L4	E4H5308R.D	10/15/2013	12:13	3.984	12.141
03	AR12421L4	E4H5309R.D	10/15/2013	12:31	3.984	12.140
04	AR12426L4	E4H5310R.D	10/15/2013	12:50	3.984	12.140
05	AR12422L4	E4H5311R.D	10/15/2013	13:08	3.984	12.141
06	AR12423L4	E4H5312R.D	10/15/2013	13:26	3.983	12.139
07	AR12424L4	E4H5313R.D	10/15/2013	13:44	3.983	12.140
08	AR12425L4	E4H5314R.D	10/15/2013	14:02	3.983	12.139
09	AR12481L4	E4H5315R.D	10/15/2013	14:20	3.984	12.141
10	AR12486L4	E4H5316R.D	10/15/2013	14:38	3.985	12.140
11	AR12482L4	E4H5317R.D	10/15/2013	14:57	3.983	12.138
12	AR12483L4	E4H5318R.D	10/15/2013	15:15	3.982	12.138
13	AR12484L4	E4H5319R.D	10/15/2013	15:33	3.982	12.139
14	AR12485L4	E4H5320R.D	10/15/2013	15:51	3.982	12.142
15	AR12541L4	E4H5321R.D	10/15/2013	16:10	3.982	12.142
16	AR12546L4	E4H5322R.D	10/15/2013	16:29	3.980	12.139
17	AR12542L4	E4H5323R.D	10/15/2013	16:47	3.982	12.140
18	AR12543L4	E4H5324R.D	10/15/2013	17:05	3.983	12.141
19	AR12544L4	E4H5325R.D	10/15/2013	17:23	3.982	12.140
20	AR12545L4	E4H5326R.D	10/15/2013	17:41	3.982	12.139
21	AR12623L4	E4H5327R.D	10/15/2013	17:59	3.984	12.140
22	AR12683L4	E4H5328R.D	10/15/2013	18:17	3.982	12.141
23	AR16601L4	E4H5329R.D	10/15/2013	18:36	3.983	12.140
24	AR16606L4	E4H5330R.D	10/15/2013	18:54	3.982	12.140
25	AR16602L4	E4H5331R.D	10/15/2013	19:12	3.982	12.140
26	AR16603L4	E4H5332R.D	10/15/2013	19:30	3.983	12.139
27	AR16604L4	E4H5333R.D	10/15/2013	19:48	3.982	12.138

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2034 Mod. Ref No.: SDG No.: SM2034

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.982 DCB: 12.139

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605L4	E4H5334R.D	10/15/2013	20:06	3.983	12.139
29	AR16603LT	E4H5540R.D	10/22/2013	15:45	3.979	12.134
30	MB-74415	E4H5544R.D	10/22/2013	16:58	3.979	12.133
31	LCS-74415	E4H5545R.D	10/22/2013	17:16	3.980	12.132
32	LCSD-74415	E4H5546R.D	10/22/2013	17:34	3.980	12.133
33	CDE-OU1-NM1-A12-131	E4H5547R.D	10/22/2013	17:52	3.978	12.131
34	CDE-OU1-NM1-B12-133	E4H5548R.D	10/22/2013	18:10	3.980	12.131
35	AR16603LU	E4H5554R.D	10/22/2013	19:59	3.980	12.132

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/21/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?	X		

Notes/Comments

APPLICABLE QC CHECKLISTS.

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

10/21/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/21/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 65°F SUNNY. WIND: 12-15 WSW.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE. TRAFFIC AWARENESS, PLANNED AVOIDANCE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: SAMPLING PROPOSED EXCAVATION AREAS AS PART OF OU1 NEWMARKET RIGHT OF WAY WORK.

Description of Chemical Data Acquisition Work Performed: ANALYSIS REQUESTED: TOTAL PCBS PLUS ADDITIONAL AROCLORS 1262 AND 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED OVERNIGHT TO MITKEM LABS VIA FEDEX. (SEE ATTACHED INFO.)

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: ~~NONE~~ SECONDARY SAMPLES COLLECTED WILL BE KEPT ON SITE PENDING THESE RESULTS.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

[signature] for QCM — 10/21/13

Signature — Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/22/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMPERATURE BLANK	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

10/21/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/21/13

☒ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☒	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☒	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☒	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☒	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☒	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☒	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☒	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☒	☐	☐	Is an ice source available on or near the site?	

☒ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	Eric Tschudi	10/21/13
CQC Systems Manager	[illegible]	[illegible]	10/21/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 10/24/13
TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS +1262, 1268	TEMPERATURE
	CDE-OU1-										
	NM1-A12-131	10/21/13	1400	G	SO		1			X	
	NM1-B12-133	10/21/13	1430	G	SO		1			X	
	TEMP BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FED EX	10/21/13	1700	

☐ EDD Format
☐ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 21OCT13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 22 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7969 6094 8461

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796960948461
Ship date: 10/21/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 of

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

PCB SOIL SAMPLING
OU1, NEW MARKET RIGHT OF WAY
SUNNY 67°F. WIND 12-15 WSW.

10/21/13

1330 E. TSCHUDI ARRIVE TO RIGHT OF WAY EXCAVATION AREA BETWEEN HANCOCK AND BERGEN. THIS AREA IS IDENTIFIED IN FIGURE 1 OF THE SITE DRAWINGS, AUGUST 2013. THE FOLLOWING INFO/PROCEDURES WILL IDENTIFY THE STANDARD PROCESS BY WHICH SOIL SAMPLES WILL BE COLLECTED AS PART OF THE OU1, NEW MARKET RIGHT OF WAY REMEDIATION. A STAINLESS STEEL AUGER BUCKET IS ADVANCED TO A DEPTH OF 12 INCES BELOW SURFACE (BLS). A SINGLE 4 OZ SOIL JAR IS FILLED USING A STAINLESS SAMPLING SPOON. THE SOIL MATERIAL IS COLLECTED DIRECTLY FROM THE LEADING END OF BUCKET, AND TRANSFERED DIRECTLY INTO THE SAMPLE JAR. THE AUGER IS THEN ADVANCED (WITH A NEW BUCKET) TO A DEPTH OF 18" BLS, AND A SECOND 4 OZ SOIL SAMPLE IS COLLECTED WITH A CLEAN SPOON. THE SAMPLE LOCATION IS DETERMINED BY IDENTIFYING THE HIGHEST CONCENTRATION OF PCBs IN THE SOIL SAMPLING PREVIOUSLY CONDUCTED. - SEE FIGURES 1-4 OF SITE DRAWINGS (AUG. 2013).

[signature] 10/21/13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

10/21/13

THE FOLLOWING PAGES 72 AND 73 WILL CONTAIN A SITE MAP SHOWING SOIL SAMPLE LOCATIONS AND A SUMMARY LOG OF SAMPLES COLLECTED AS PART OF THIS CURRENT PHASE OF WORK WITHIN THE AREAS OF EXCAVATION FOR NEW MARKET AVENUE BETWEEN HANCOCK STREET AND BERGEN STREET. THIS AREA IS REFERRED TO AS NM1 IN THE SAMPLE CODE AS IT PERTAINS TO FIGURE 1 IN THE SITE DRAWINGS. ADDITIONAL MAPS WILL BE ADDED AND REFERENCED AS PROGRESS IS MADE.

1400 COLLECT SAMPLE ATT ——— (2)
CDE-OU1-NM1-A12-131 - SEE P. 67 FOR EXPLAINATION OF SAMPLE CODE.

1415 COLLECT: CDE-OU1-NM1-A18-132
SOIL SAMPLES COLLECTED A 18" BLS WILL BE STORED ON SITE AND HELD PENDING THE RESULTS OF THE SAMPLES COLLECTED AT 12" BLS. IF THE 12" SAMPLE PASSES, = <1.0 ppm TOTAL PCB, THEN THE 18" BLS SAMPLE WILL BE DISCARDED.

1430 COLLECT CDE-OU1-NM1-B12-133

1445 COLLECT CDE-OU1-NM1-B18-134
SEE P. 72, 73 FOR MAP AND LOG.

[signature] 10/21/13

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

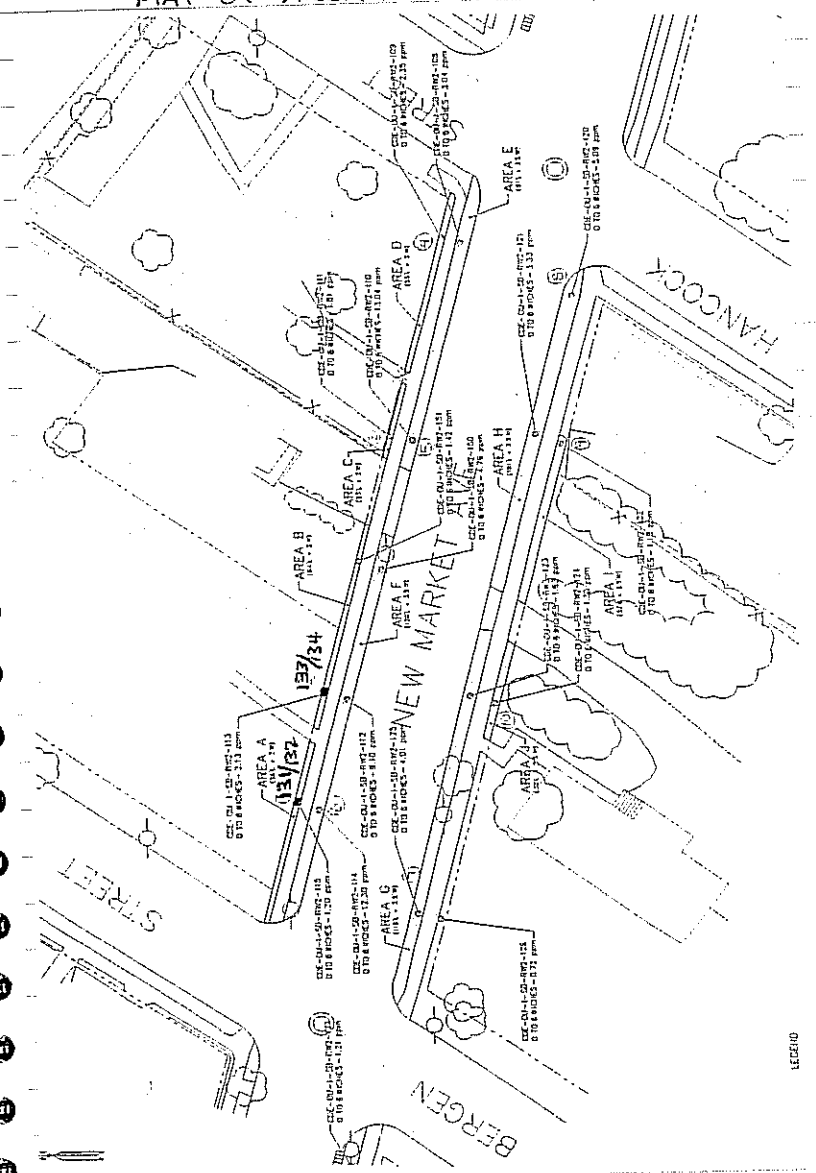
72

SOIL SAMPLE LOG START: 10/21/13

(2013) DATE/TIME		(CDE OU1-) SAMPLE CODE	RESULT
10/21	1400	NM1-A12-131	
10/21	1415	NM1-A18-132	
10/21	1430	NM1-B12-133	
10/21	1445	NM1-B18-134	

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

73



10/21/13

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-463

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
59	Final Sample NM1#135 & 137 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #135 passed criteria for PCB's at 0.21 ppm,
Sample #137 passed criteria for PCB's at 0.29 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
12-Nov-13 16:21

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2047
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2047-01	CDE-OU1-NM1-C12-135	Soil	22-Oct-13 13:30	23-Oct-13 08:45
M2047-02	CDE-OU1-NM1-D12-137	Soil	22-Oct-13 14:00	23-Oct-13 08:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2047

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3510C

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-C12-135 (M2047-01A), recovery is below criteria for Decachlorobiphenyl on front column at 51% with criteria of (60-125).

CDE-OU1-NM1-D12-137 (M2047-02A), recovery is below criteria for Decachlorobiphenyl on front column at 51% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than

40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/12/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-NM1-C12-135

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2047-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H5568F.D/E4H5568R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 10/23/2013

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	210	P
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-NM1-D12-137

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2047-02A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H5569F.D/E4H5569R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 10/23/2013

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	290	P
11096-82-5	Aroclor-1260	37	U
37324-23-5	Aroclor-1262	37	U
11100-14-4	Aroclor-1268	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-74428

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74428

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5565F.D/E4H5565R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-74428(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74428

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5566F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	80	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	82	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-74428(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74428

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5566R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	90	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	95	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-74428(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74428

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5567F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	79	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	82	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-74428(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74428

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5567R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 10/23/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	88	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	95	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74428	60	63	60	71			0
02	LCS-74428	60	64	62	72			0
03	LCSD-74428	58	62	62	72			0
04	CDE-OU1-NM1-C12-135	59	62	51 *	61			1
05	CDE-OU1-NM1-D12-137	60	63	51 *	61			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-74428

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Lab Sample ID: LCS-74428 LCS Lot No.: A072217

Date Extracted: 10/23/2013 Date Analyzed (1): 10/23/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	80.4484	60		40-140
Aroclor-1260	133.3330	82.4939	62		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/23/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	89.8052	67		40-140
Aroclor-1260	133.3330	94.8430	71		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.21.A

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.

LCSD-74428

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Lab Sample ID: LCSD-74428 LCS Lot No.: A072217

Date Extracted: 10/23/2013 Date Analyzed (1): 10/23/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	78.7945	59		40-140	2.0		30
Aroclor-1260	133.3330	81.9384	61		60-130	2.0		30

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/23/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	87.6269	66		40-140	2.0		30
Aroclor-1260	133.3330	95.2652	71		60-130	0		30

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

RPD: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-74428

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

Lab File ID: E4H5565F.D / E4H5565R.D Lab Sample ID: MB-74428

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SEPF Date Extracted: 10/23/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 10/23/2013 Date Analyzed (2): 10/23/2013

Time Analyzed (1): 16:50 Time Analyzed (2): 16:50

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74428	LCS-74428	10/23/2013	10/23/2013
02	LCSD-74428	LCSD-74428	10/23/2013	10/23/2013
03	CDE-OU1-NM1-C12-135	M2047-01A	10/23/2013	10/23/2013
04	CDE-OU1-NM1-D12-137	M2047-02A	10/23/2013	10/23/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.263 DCB: 9.719

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213L4	E4H5307F.D	10/15/2013	11:55	3.266	9.722
02	AR12323L4	E4H5308F.D	10/15/2013	12:13	3.266	9.721
03	AR12421L4	E4H5309F.D	10/15/2013	12:31	3.265	9.721
04	AR12426L4	E4H5310F.D	10/15/2013	12:50	3.265	9.720
05	AR12422L4	E4H5311F.D	10/15/2013	13:08	3.265	9.719
06	AR12423L4	E4H5312F.D	10/15/2013	13:26	3.264	9.720
07	AR12424L4	E4H5313F.D	10/15/2013	13:44	3.265	9.720
08	AR12425L4	E4H5314F.D	10/15/2013	14:02	3.264	9.720
09	AR12481L4	E4H5315F.D	10/15/2013	14:20	3.265	9.720
10	AR12486L4	E4H5316F.D	10/15/2013	14:38	3.265	9.720
11	AR12482L4	E4H5317F.D	10/15/2013	14:57	3.265	9.719
12	AR12483L4	E4H5318F.D	10/15/2013	15:15	3.264	9.719
13	AR12484L4	E4H5319F.D	10/15/2013	15:33	3.264	9.720
14	AR12485L4	E4H5320F.D	10/15/2013	15:51	3.264	9.720
15	AR12541L4	E4H5321F.D	10/15/2013	16:10	3.264	9.720
16	AR12546L4	E4H5322F.D	10/15/2013	16:29	3.264	9.721
17	AR12542L4	E4H5323F.D	10/15/2013	16:47	3.263	9.720
18	AR12543L4	E4H5324F.D	10/15/2013	17:05	3.264	9.720
19	AR12544L4	E4H5325F.D	10/15/2013	17:23	3.264	9.720
20	AR12545L4	E4H5326F.D	10/15/2013	17:41	3.263	9.718
21	AR12623L4	E4H5327F.D	10/15/2013	17:59	3.265	9.720
22	AR12683L4	E4H5328F.D	10/15/2013	18:17	3.264	9.719
23	AR16601L4	E4H5329F.D	10/15/2013	18:36	3.263	9.719
24	AR16606L4	E4H5330F.D	10/15/2013	18:54	3.263	9.717
25	AR16602L4	E4H5331F.D	10/15/2013	19:12	3.263	9.720
26	AR16603L4	E4H5332F.D	10/15/2013	19:30	3.264	9.719
27	AR16604L4	E4H5333F.D	10/15/2013	19:48	3.263	9.719

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.263 DCB: 9.719

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605L4	E4H5334F.D	10/15/2013	20:06	3.263	9.719
29	AR16603LV	E4H5559F.D	10/23/2013	9:57	3.265	9.721
30	AR12543LV	E4H5560F.D	10/23/2013	10:18	3.262	9.719
31	MB-74428	E4H5565F.D	10/23/2013	16:50	3.265	9.723
32	LCS-74428	E4H5566F.D	10/23/2013	17:08	3.261	9.716
33	LCSD-74428	E4H5567F.D	10/23/2013	17:26	3.261	9.715
34	CDE-OU1-NM1-C12-135	E4H5568F.D	10/23/2013	17:44	3.261	9.715
35	CDE-OU1-NM1-D12-137	E4H5569F.D	10/23/2013	18:02	3.262	9.715
36	AR16603LW	E4H5571F.D	10/23/2013	18:38	3.262	9.713
37	AR12543LW	E4H5572F.D	10/23/2013	18:56	3.262	9.714

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.982 DCB: 12.139

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213L4	E4H5307R.D	10/15/2013	11:55	3.985	12.137
02	AR12323L4	E4H5308R.D	10/15/2013	12:13	3.984	12.141
03	AR12421L4	E4H5309R.D	10/15/2013	12:31	3.984	12.140
04	AR12426L4	E4H5310R.D	10/15/2013	12:50	3.984	12.140
05	AR12422L4	E4H5311R.D	10/15/2013	13:08	3.984	12.141
06	AR12423L4	E4H5312R.D	10/15/2013	13:26	3.983	12.139
07	AR12424L4	E4H5313R.D	10/15/2013	13:44	3.983	12.140
08	AR12425L4	E4H5314R.D	10/15/2013	14:02	3.983	12.139
09	AR12481L4	E4H5315R.D	10/15/2013	14:20	3.984	12.141
10	AR12486L4	E4H5316R.D	10/15/2013	14:38	3.985	12.140
11	AR12482L4	E4H5317R.D	10/15/2013	14:57	3.983	12.138
12	AR12483L4	E4H5318R.D	10/15/2013	15:15	3.982	12.138
13	AR12484L4	E4H5319R.D	10/15/2013	15:33	3.982	12.139
14	AR12485L4	E4H5320R.D	10/15/2013	15:51	3.982	12.142
15	AR12541L4	E4H5321R.D	10/15/2013	16:10	3.982	12.142
16	AR12546L4	E4H5322R.D	10/15/2013	16:29	3.980	12.139
17	AR12542L4	E4H5323R.D	10/15/2013	16:47	3.982	12.140
18	AR12543L4	E4H5324R.D	10/15/2013	17:05	3.983	12.141
19	AR12544L4	E4H5325R.D	10/15/2013	17:23	3.982	12.140
20	AR12545L4	E4H5326R.D	10/15/2013	17:41	3.982	12.139
21	AR12623L4	E4H5327R.D	10/15/2013	17:59	3.984	12.140
22	AR12683L4	E4H5328R.D	10/15/2013	18:17	3.982	12.141
23	AR16601L4	E4H5329R.D	10/15/2013	18:36	3.983	12.140
24	AR16606L4	E4H5330R.D	10/15/2013	18:54	3.982	12.140
25	AR16602L4	E4H5331R.D	10/15/2013	19:12	3.982	12.140
26	AR16603L4	E4H5332R.D	10/15/2013	19:30	3.983	12.139
27	AR16604L4	E4H5333R.D	10/15/2013	19:48	3.982	12.138

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2047 Mod. Ref No.: SDG No.: SM2047

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.982 DCB: 12.139

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605L4	E4H5334R.D	10/15/2013	20:06	3.983	12.139
29	AR16603LV	E4H5559R.D	10/23/2013	9:57	3.973	12.133
30	AR12543LV	E4H5560R.D	10/23/2013	10:18	3.974	12.131
31	MB-74428	E4H5565R.D	10/23/2013	16:50	3.971	12.128
32	LCS-74428	E4H5566R.D	10/23/2013	17:08	3.975	12.131
33	LCSD-74428	E4H5567R.D	10/23/2013	17:26	3.975	12.130
34	CDE-OU1-NM1-C12-135	E4H5568R.D	10/23/2013	17:44	3.977	12.128
35	CDE-OU1-NM1-D12-137	E4H5569R.D	10/23/2013	18:02	3.977	12.132
36	AR16603LW	E4H5571R.D	10/23/2013	18:38	3.977	12.130
37	AR12543LW	E4H5572R.D	10/23/2013	18:56	3.978	12.133

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/22/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC CHECKLISTS

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/22/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/22/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 62°F, OVERCAST, WIND S-10 WEST, LIGHT-INTERMITTENT RAIN.

Subcontractors Present Onsite: LAYOUT, SURVEYORS.

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: SOIL SAMPLING OF EXCAVATION AREAS ALONG RIGHT OF WAY OF ~~HAMILTON~~ NEW MARKET AVE BETWEEN HANCOCK AND BERGEN.

Description of Chemical Data Acquisition Work Performed: ANALYSIS OF SOIL SAMPLES: TOTAL PCBs, TO INCLUDE ADDITIONAL AROCLORS 1262 AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITICEM LABS, OVERNIGHT VIA FEDEX. SEE ATTACHED.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: ~~THESE SAMPLES~~ SECONDARY SOIL SAMPLES WERE COLLECTED AT LOCATIONS WITHIN AREA C AND D, (DEPTH 18" BLS) THEY ARE TO BE KEPT ON SITE PENDING THE RESULTS OF THE SAMPLES COLLECTE FROM THOSE AREAS AT 12" BLS.

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NONE

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 10/22/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/22/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMPERATURE BLANK.	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/22/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/22/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI		10/22/13
CQC Systems Manager	William Zamsnan		10/22/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 10/25/13
TAT- Indicate Date Needed: 2DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS +1262, 1268	TEMPERATURE
	NM1-C12-135	10/22/13	1330	G	SO		1			X	
	NM1-D12-137	10/22/13	1400	G	SO		1			X	
	TEMP BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FEDEX	10/22/13	1700	

☐ EDD Format
☐ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 22OCT13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Comell
Dept #

WED - 23 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 7969 7141 2545
0201

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796971412545
Ship date: 10/22/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

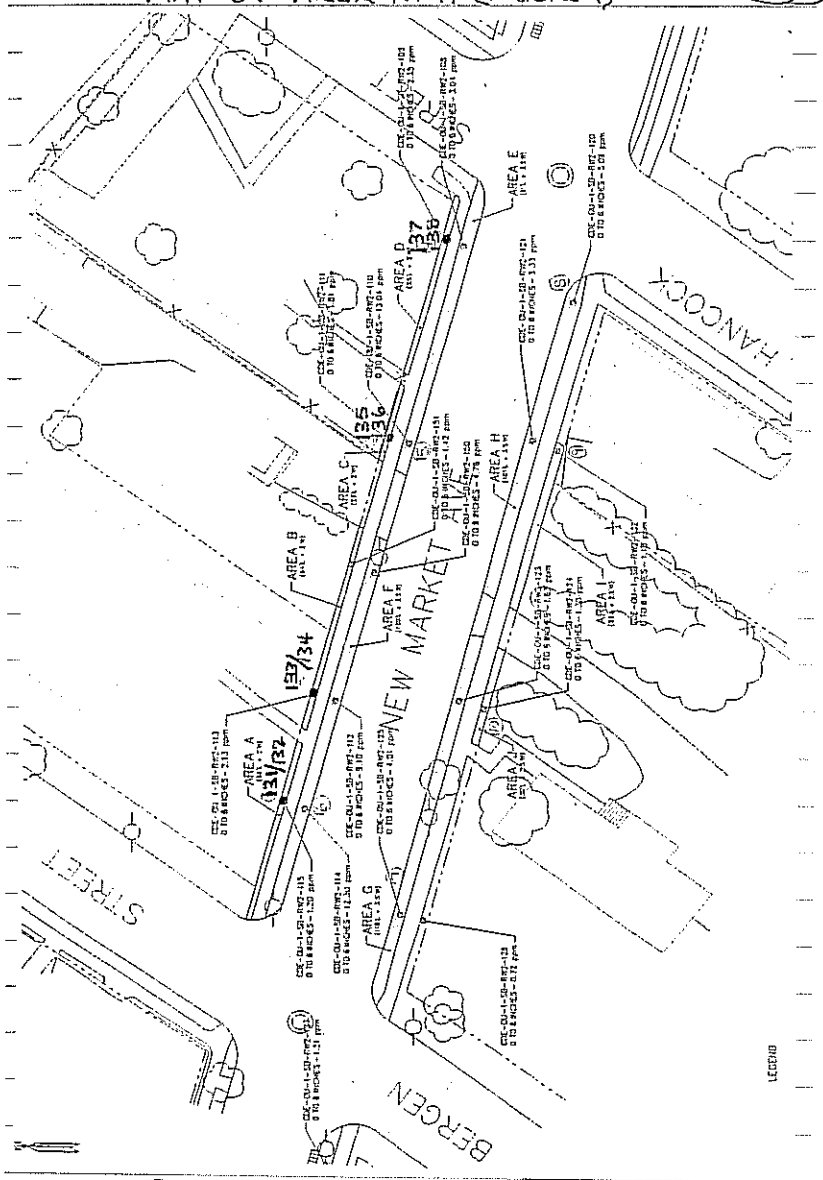
OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE	TIME	(CDEQUI-) SAMPLE CODE	RESULT
10/21	1400	NM1-A12-131	
10/21	1415	NM1-A18-132	
10/21	1430	NM1-B12-133	
10/21	1445	NM1-B18-134	
10/22	1330	NM1-C12-135	
10/22	1345	NM1-C18-136	
10/22	1400	NM1-D12-137	
10/22	1415	NM1-D18-138	

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



10/21/13

"Rain in the Rain"

10/22/13

1315 ARRIVE TO NEWMARKET AVE EXCAVATION AREA 1 (FIG. 1). TO RESUME SOIL SAMPLING ACTIVITIES. SET UP TO SAMPLE IN AREA C, SEE FIGURE 1 OF SITE DRAWING OF EXCAVATION PLANS, THIS AREA IDENTIFIES THE EXCAVATIONS BETWEEN HANCOCK AND BERGEN STREETS. THE PROCEDURES FOR SAMPLING THESE AREAS ARE AS FOLLOWS. A REVIEW OF SITE DRAWINGS WILL REVEAL THE BORING LOCATIONS OF THE PREVIOUSLY CONDUCTED SAMPLING INVESTIGATION. ~~WITHIN~~ THE ANALYTICAL RESULTS ARE LISTED ON THE DRAWINGS, AS ARE THE DEFINED EXCAVATION AREAS. IT HAS BEEN DETERMINED THAT SES WILL SELECT THE SOIL SAMPLE LOCATIONS BASED ON IDENTIFYING THE LOCATION OF HIGHEST PCB CONCENTRATION FROM THE PREVIOUS SAMPLING INVESTIGATION CONDUCTED BY ARCADIS/MALCOLM PIRNIE. ALL SAMPLES WILL BE SHIPPED TO MITKEM LABORATORY FOR TOTAL PCB ANALYSIS INCLUDING THE ADDITIONAL AROCLORS 1262 AND 1268. SEE NEXT PAGE FOR LAB SHIPPING INFO.

10/22/13

LABORATORY INFORMATION

MITKEM LABORATORIES (SPECTRUM)
646 CAMP AVENUE
NORTH KINGSTOWN, R.I. 02852
CONTACT: AGNES HUNTLEY
EMAIL: AGNES_NG@MITKEM.COM
PHONE: (401) 732-3400

10/22/13 1330 COLLECT PCB SOIL SAMPLE CDE-OU1-NM1-C12-135 AT 12" BLS. UPDATE TO WEATHER: 62°F OVERCAST VERY LIGHT RAIN. CONTINUE ADVANCING AUGER WITHIN AREA C (NM1), TO 18" BLS.

1345 COLLECT CDE-OU1-NM1-C18-136. MOVE TO AREA D (NM1) TO COLLECT SAMPLES. THESE SAMPLE AREAS ARE LOCATED ALONG THE RIGHT OF WAY OF HAMILTON BLVD BETWEEN HANCOCK AND BERGEN STREETS.

1400 COLLECT CDE-~~NM1~~ OU1-NM1-D12-137. CONTINUE TO ADVANCE AUGER TO 18" TO

1415 COLLECT CDE-OU1-NM1-D18-138. RETURN TO SITE TRAILER TO PROCESS AND SHIP SAMPLES TO LAB. NOTE! ONLY SHIPPING SAMPLES FROM 12" BLS DEPTH, 18" BLS SAMPLES ARE BEING KEPT ON SITE PENDING THE RESULTS OF 12" BLS DEPTH.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-464

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
60	Info Sample NM1#139 & 141 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #139 failed criteria for PCB's at 1.20 ppm
Sample #141 failed criteria for PCB's at 2.60 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
12-Nov-13 15:28

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2063
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2063-01	CDE-OU1-NM1-E12-139	Soil	23-Oct-13 13:30	24-Oct-13 09:40
M2063-02	CDE-OU1-NM1-F12-141	Soil	23-Oct-13 14:00	24-Oct-13 09:40

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2063

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-E12-139 (M2063-01A) : Dilution Factor: 10
CDE-OU1-NM1-F12-141 (M2063-02A) : Dilution Factor: 20

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/12/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-E12-139

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2063-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5626F.D/E4H5626R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 10/24/2013

Extraction: (Type) SONC Date Extracted: 10/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/25/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	390	U
11104-28-2	Aroclor-1221	390	U
11141-16-5	Aroclor-1232	390	U
53469-21-9	Aroclor-1242	390	U
12672-29-6	Aroclor-1248	390	U
11097-69-1	Aroclor-1254	1200	
11096-82-5	Aroclor-1260	390	U
37324-23-5	Aroclor-1262	390	U
11100-14-4	Aroclor-1268	390	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F12-141

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2063-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5627F.D/E4H5627R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 10/24/2013

Extraction: (Type) SONC Date Extracted: 10/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/25/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	730	U
11104-28-2	Aroclor-1221	730	U
11141-16-5	Aroclor-1232	730	U
53469-21-9	Aroclor-1242	730	U
12672-29-6	Aroclor-1248	730	U
11097-69-1	Aroclor-1254	2600	
11096-82-5	Aroclor-1260	730	U
37324-23-5	Aroclor-1262	730	U
11100-14-4	Aroclor-1268	730	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74455

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74455

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5733F.D/E4H5733R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/30/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74455(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74455

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5734F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/30/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	140	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74455(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74455

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5734R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/24/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/30/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	140	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	150	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	CDE-OU1-NM1-E12-139	65	68	74	79			0
02	CDE-OU1-NM1-F12-141	64	69	83	93			0
03	MB-74455	93	91	97	99			0
04	LCS-74455	103	99	99	100			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74455

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Lab Sample ID: LCS-74455 LCS Lot No.: A072217

Date Extracted: 10/24/2013 Date Analyzed (1): 10/30/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	138.9756	104		40-140
Aroclor-1260	133.3330	142.0646	107		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/30/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	135.1933	101		40-140
Aroclor-1260	133.3330	147.5179	111		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74455

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

Lab File ID: E4H5733F.D / E4H5733R.D Lab Sample ID: MB-74455

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 10/24/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 10/30/2013 Date Analyzed (2): 10/30/2013

Time Analyzed (1): 1:46 Time Analyzed (2): 1:46

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	CDE-OU1-NM1-E12-139	M2063-01A	10/25/2013	10/25/2013
02	CDE-OU1-NM1-F12-141	M2063-02A	10/25/2013	10/25/2013
03	LCS-74455	LCS-74455	10/30/2013	10/30/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.263 DCB: 9.719

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213L4	E4H5307F.D	10/15/2013	11:55	3.266	9.722
02	AR12323L4	E4H5308F.D	10/15/2013	12:13	3.266	9.721
03	AR12421L4	E4H5309F.D	10/15/2013	12:31	3.265	9.721
04	AR12426L4	E4H5310F.D	10/15/2013	12:50	3.265	9.720
05	AR12422L4	E4H5311F.D	10/15/2013	13:08	3.265	9.719
06	AR12423L4	E4H5312F.D	10/15/2013	13:26	3.264	9.720
07	AR12424L4	E4H5313F.D	10/15/2013	13:44	3.265	9.720
08	AR12425L4	E4H5314F.D	10/15/2013	14:02	3.264	9.720
09	AR12481L4	E4H5315F.D	10/15/2013	14:20	3.265	9.720
10	AR12486L4	E4H5316F.D	10/15/2013	14:38	3.265	9.720
11	AR12482L4	E4H5317F.D	10/15/2013	14:57	3.265	9.719
12	AR12483L4	E4H5318F.D	10/15/2013	15:15	3.264	9.719
13	AR12484L4	E4H5319F.D	10/15/2013	15:33	3.264	9.720
14	AR12485L4	E4H5320F.D	10/15/2013	15:51	3.264	9.720
15	AR12541L4	E4H5321F.D	10/15/2013	16:10	3.264	9.720
16	AR12546L4	E4H5322F.D	10/15/2013	16:29	3.264	9.721
17	AR12542L4	E4H5323F.D	10/15/2013	16:47	3.263	9.720
18	AR12543L4	E4H5324F.D	10/15/2013	17:05	3.264	9.720
19	AR12544L4	E4H5325F.D	10/15/2013	17:23	3.264	9.720
20	AR12545L4	E4H5326F.D	10/15/2013	17:41	3.263	9.718
21	AR12623L4	E4H5327F.D	10/15/2013	17:59	3.265	9.720
22	AR12683L4	E4H5328F.D	10/15/2013	18:17	3.264	9.719
23	AR16601L4	E4H5329F.D	10/15/2013	18:36	3.263	9.719
24	AR16606L4	E4H5330F.D	10/15/2013	18:54	3.263	9.717
25	AR16602L4	E4H5331F.D	10/15/2013	19:12	3.263	9.720
26	AR16603L4	E4H5332F.D	10/15/2013	19:30	3.264	9.719
27	AR16604L4	E4H5333F.D	10/15/2013	19:48	3.263	9.719

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.263 DCB: 9.719

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605L4	E4H5334F.D	10/15/2013	20:06	3.263	9.719
29	AR16603LA	E4H5605F.D	10/25/2013	8:33	3.260	9.716
30	AR12543LA	E4H5606F.D	10/25/2013	9:01	3.266	9.723
31	CDE-OU1-NM1-E12-139	E4H5626F.D	10/25/2013	15:03	3.259	9.713
32	CDE-OU1-NM1-F12-141	E4H5627F.D	10/25/2013	15:21	3.260	9.713
33	AR16603LB	E4H5630F.D	10/25/2013	16:16	3.260	9.714
34	AR12543LB	E4H5631F.D	10/25/2013	16:34	3.260	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.982 DCB: 12.139

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213L4	E4H5307R.D	10/15/2013	11:55	3.985	12.137
02	AR12323L4	E4H5308R.D	10/15/2013	12:13	3.984	12.141
03	AR12421L4	E4H5309R.D	10/15/2013	12:31	3.984	12.140
04	AR12426L4	E4H5310R.D	10/15/2013	12:50	3.984	12.140
05	AR12422L4	E4H5311R.D	10/15/2013	13:08	3.984	12.141
06	AR12423L4	E4H5312R.D	10/15/2013	13:26	3.983	12.139
07	AR12424L4	E4H5313R.D	10/15/2013	13:44	3.983	12.140
08	AR12425L4	E4H5314R.D	10/15/2013	14:02	3.983	12.139
09	AR12481L4	E4H5315R.D	10/15/2013	14:20	3.984	12.141
10	AR12486L4	E4H5316R.D	10/15/2013	14:38	3.985	12.140
11	AR12482L4	E4H5317R.D	10/15/2013	14:57	3.983	12.138
12	AR12483L4	E4H5318R.D	10/15/2013	15:15	3.982	12.138
13	AR12484L4	E4H5319R.D	10/15/2013	15:33	3.982	12.139
14	AR12485L4	E4H5320R.D	10/15/2013	15:51	3.982	12.142
15	AR12541L4	E4H5321R.D	10/15/2013	16:10	3.982	12.142
16	AR12546L4	E4H5322R.D	10/15/2013	16:29	3.980	12.139
17	AR12542L4	E4H5323R.D	10/15/2013	16:47	3.982	12.140
18	AR12543L4	E4H5324R.D	10/15/2013	17:05	3.983	12.141
19	AR12544L4	E4H5325R.D	10/15/2013	17:23	3.982	12.140
20	AR12545L4	E4H5326R.D	10/15/2013	17:41	3.982	12.139
21	AR12623L4	E4H5327R.D	10/15/2013	17:59	3.984	12.140
22	AR12683L4	E4H5328R.D	10/15/2013	18:17	3.982	12.141
23	AR16601L4	E4H5329R.D	10/15/2013	18:36	3.983	12.140
24	AR16606L4	E4H5330R.D	10/15/2013	18:54	3.982	12.140
25	AR16602L4	E4H5331R.D	10/15/2013	19:12	3.982	12.140
26	AR16603L4	E4H5332R.D	10/15/2013	19:30	3.983	12.139
27	AR16604L4	E4H5333R.D	10/15/2013	19:48	3.982	12.138

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/15/2013 10/15/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.982 DCB: 12.139

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605L4	E4H5334R.D	10/15/2013	20:06	3.983	12.139
29	AR16603LA	E4H5605R.D	10/25/2013	8:33	3.974	12.130
30	AR12543LA	E4H5606R.D	10/25/2013	9:01	3.974	12.135
31	CDE-OU1-NM1-E12-139	E4H5626R.D	10/25/2013	15:03	3.975	12.131
32	CDE-OU1-NM1-F12-141	E4H5627R.D	10/25/2013	15:21	3.975	12.131
33	AR16603LB	E4H5630R.D	10/25/2013	16:16	3.976	12.134
34	AR12543LB	E4H5631R.D	10/25/2013	16:34	3.976	12.135

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NA	E4H5729F.D	10/30/2013	0:34	3.259	9.713
30	AR12543NA	E4H5730F.D	10/30/2013	0:52	3.259	9.713
31	MB-74455	E4H5733F.D	10/30/2013	1:46	3.259	9.713
32	LCS-74455	E4H5734F.D	10/30/2013	2:04	3.259	9.714
33	AR16603NB	E4H5742F.D	10/30/2013	4:28	3.259	9.713
34	AR12543NB	E4H5743F.D	10/30/2013	4:46	3.260	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2063 Mod. Ref No.: SDG No.: SM2063

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NA	E4H5729R.D	10/30/2013	0:34	3.975	12.134
30	AR12543NA	E4H5730R.D	10/30/2013	0:52	3.975	12.133
31	MB-74455	E4H5733R.D	10/30/2013	1:46	3.976	12.133
32	LCS-74455	E4H5734R.D	10/30/2013	2:04	3.975	12.133
33	AR16603NB	E4H5742R.D	10/30/2013	4:28	3.975	12.134
34	AR12543NB	E4H5743R.D	10/30/2013	4:46	3.976	12.132

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC CHECKLISTS

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/23/13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? TEMPERATURE BLANK	X	–		
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHIDI

Date

10/23/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/23/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ – **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

X	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
X	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
X	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
X	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
X	☐	☐	Were chain-of-custody forms completed per SAP?	_____
X	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
X	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
X	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
X	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
X	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
X	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
X	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
X	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
X	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
X	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
X	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
X	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
X	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	BRK TSCHUDI	[illegible]	10/23/13
CQC Systems Manager	[illegible]	[illegible]	10/23/13

DUI SOIL SAMPLE
LOG BOOK 2 of

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

(76)

OU1, RIGHT OF WAY, NEWMARKET AVE.
PCB SOIL SAMPLING. CONT'D. 10/23/13

1300 60°F, MOSTLY CLOUDY, WIND WSW 10.
E. TSCHUDI ARRIVES TO NEWMARKET AVE
TO RESUME PCB SOIL SAMPLING. CURRENTLY
SETTING UP TO SAMPLE EXCAVATION
AREAS E AND F, SEE OU1RD DRAWINGS
FOR NEWMARKET AVE RIGHT OF WAY.
AS THE FIGURE 1 SHOWS, SEVERAL SAMPLE
LOCATIONS ARE IDENTIFIED ON THE MAP
FROM PREVIOUS SAMPLING EVENTS ~~FROM~~
CONDUCTED BY ARCADIS/MALCOLM PIRNIE
OF THOSE PREVIOUS LOCATIONS, SES HAS
DETERMINED THAT TODAY'S SAMPLES
WILL BE COLLECTED IN LOCATION OF
HIGHEST CONCENTRATION OF PCBS FROM
THE PREVIOUS SAMPLING EVENT. THIS
HAS BEEN, AND WILL CONTINUE TO BE
THE PROCESS BY WHICH WE WILL CON-
TINUE TO SAMPLE THESE AREAS.
ONE SAMPLE LOCATION PER AREA, 2 SAMPLES
COLLECTED PER LOCATION. ONE AT 12" BLS
AND THE SECOND AT 18" BLS.
~~14~~ SET UP AT AREA E TO COLLECT SOIL SAMPLE
USING STAINESS STEEL AUGER AND SPOON.
1-4oz VOLUME, AMBER SOIL JAR PER SAMP.

[signature] 10/23/13

(77)

OU1, NEWMARKET AVE.
RIGHT OF WAY
PCB SOIL SAMPLES 10/23/13

ADVANCE AUGER TO 1' BLS TO COLLECT.
1330 - COLLECT CDE-OU1-NM1-E12-139
CONTINUE TO 18" IN THE SAME HOLE.
1345 - COLLECT CDE-OU1-NM1-E18-140.
MOVE TO AREA F TO COLLECT 2 MORE
SAMPLES. CHANGE OUT AUGER ~~&~~ NEW/
CLEAN STAINLESS STEEL SPOONS ARE USED
FOR EACH SAMPLE.
1400 COLLECT CDE OU1 NM1-F12-141
1415 COLLECT CDE OU1 NM1-F18-142
MOVE TO SITE TRAILERS TO LABEL, WRAP
LOG SAMPLES AND PACK AND SHIP TO LAB.
SEE P. 75 FOR LAB INFORMATION
SEE P. 73 FOR SOIL SAMPLE MAP, LOCATIONS
SEE P. 72 FOR SOIL SAMPLE LOG.

[signature] 10/23/13

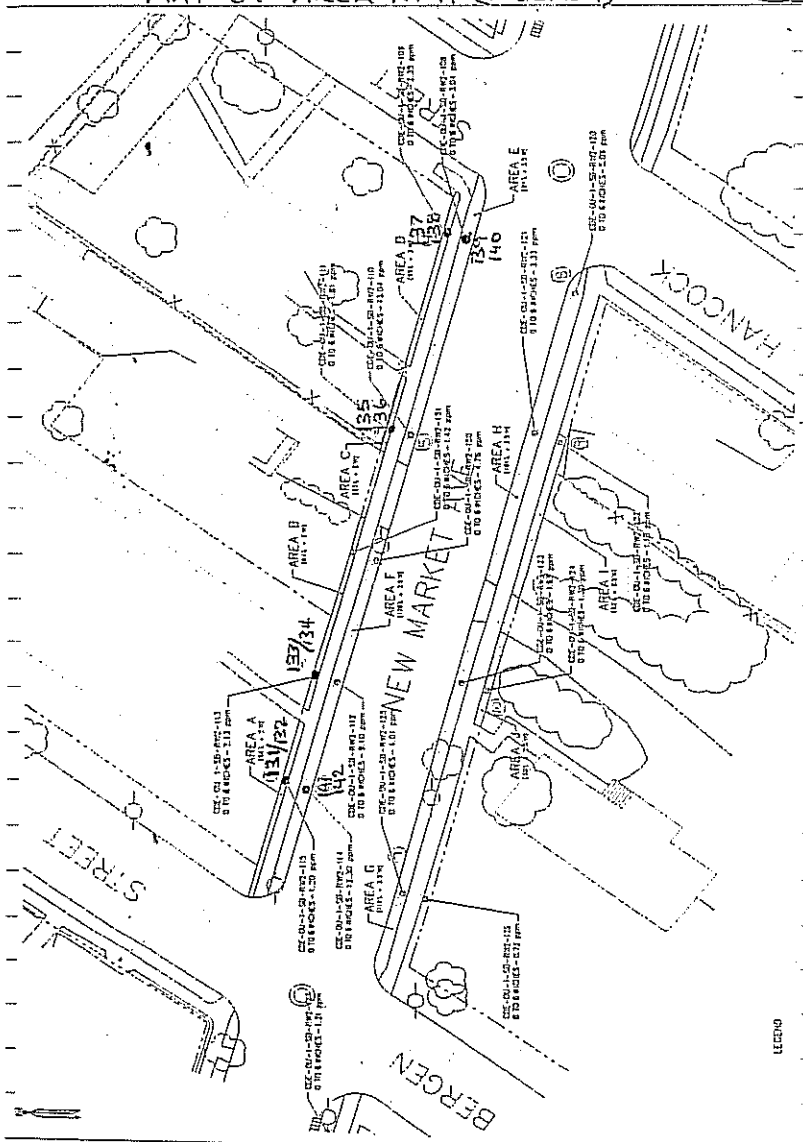
OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE/TIME		(CDE-OU1-) SAMPLE CODE	RESULT
10/21	1400	NM1-A12-131	
10/21	1415	NM1-A18-132	
10/21	1430	NM1-B12-133	
10/21	1445	NM1-B18-134	
10/22	1330	NM1-C12-135	
10/22	1345	NM1-C18-136	
10/22	1400	NM1-D12-137	
10/22	1415	NM1-D18-138	
10/23	1330	NM1-E12-139	
10/23	1345	NM1-E18-140	
10/23	1400	NM1-F12-141	
10/23	1415	NM1-F18-142	

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



10/21/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 10/26/13

TAT- Indicate Date Needed: 2 DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id: CDE-OU1-	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS 1-1262, 1268	TEMPERATURE
	NM1-E12-139	10/23/13	1330	G	SO		1			X	
	NM1-F12-141	10/23/13	1400	G	SO		1			X	
	TEMP BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FEDEX	10/23/13	1700	

☐ EDD Format
☐ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 23OCT13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 24 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 7969 8226 6010
0201

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 796982266010
Ship date: 10/23/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-465

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
61	Final Sample NM1#140 & 144 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #140 passed criteria for PCB's at 0.10 ppm,
Sample #144 passed criteria for PCB's at 0.24 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
15-Nov-13 14:45

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2109
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2109-01	CDE-OU1-NM1-E18-140	Soil	23-Oct-13 13:45	30-Oct-13 10:30
[redacted]				
M2109-03	CDE-OU1-NM1-G12-144	Soil	29-Oct-13 13:40	30-Oct-13 10:30
[redacted]				

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY TNI

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2109

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/18/13
Fax Due: 11/01/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2109-01A	CDE-OU1-NM1-E18-140	10/23/2013 13:45	10/30/2013	Soil	PMoist	/					B3
M2109-01A	CDE-OU1-NM1-E18-140	10/23/2013 13:45	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3
M2109-02A	CDE-OU1-NM1-F18-142	10/23/2013 14:15	10/30/2013	Soil	PMoist	/					B3
M2109-02A	CDE-OU1-NM1-F18-142	10/23/2013 14:15	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3
M2109-03A	CDE-OU1-NM1-G12-144	10/29/2013 13:40	10/30/2013	Soil	PMoist	/					B3
M2109-03A	CDE-OU1-NM1-G12-144	10/29/2013 13:40	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3
M2109-04A	CDE-OU1-NM1-H12-146	10/29/2013 14:15	10/30/2013	Soil	PMoist	/					B3
M2109-04A	CDE-OU1-NM1-H12-146	10/29/2013 14:15	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

10/31/2013 13:55

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2109

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-H12-146 (M2109-04A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 126% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-F18-142 (M2109-02A) : Dilution Factor: 10
CDE-OU1-NM1-H12-146 (M2109-04A) : Dilution Factor: 10

F. Samples:

The lower concentration between the primary and confirmatory GC

column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

The following samples were manually integrated:

AIBLKNG Decachlorobiphenyl on front column , Tetrachloro-m-xylene on front column due to M7

AR16603NE Aroclor-1016 on front column , Aroclor-1016 on rear column , Aroclor-1260 on rear column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/15/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-E18-140

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2109-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H5765F.D/E4H5765R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 10/30/2013

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	100	P
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-G12-144

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2109-03A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H5767F.D/E4H5767R.D

% Moisture: 8.1 Decanted: (Y/N) N Date Received: 10/30/2013

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	240	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-E18-140

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2109-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H5765F.D/E4H5765R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 10/30/2013

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	100	P
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-G12-144

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2109-03A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H5767F.D/E4H5767R.D

% Moisture: 8.1 Decanted: (Y/N) N Date Received: 10/30/2013

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	240	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74527

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5763F.D/E4H5763R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74527(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74527

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5764F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74527(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74527

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5764R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74527	85	88	86	95			0
02	LCS-74527	82	85	86	96			0
03	CDE-OU1-NM1-E18-140	77	79	68	78			0
04	CDE-OU1-NM1-G12-144	77	74	65	71			0
05	CDE-OU1-NM1-F18-142	99	101	118	118			0
06	CDE-OU1-NM1-H12-146	101	101	105	126 D			1

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Lab Sample ID: LCS-74527 LCS Lot No.:

Date Extracted: 10/30/2013 Date Analyzed (1): 10/31/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	113.4909	85		40-140
Aroclor-1260	133.3330	117.1831	88		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/31/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	124.0066	93		40-140
Aroclor-1260	133.3330	137.9740	103		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

sum13.10.21.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Lab File ID: E4H5763F.D / E4H5763R.D Lab Sample ID: MB-74527

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 10/30/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 10/31/2013 Date Analyzed (2): 10/31/2013

Time Analyzed (1): 15:30 Time Analyzed (2): 15:30

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74527	LCS-74527	10/31/2013	10/31/2013
02	CDE-OU1-NM1-E18-140	M2109-01A	10/31/2013	10/31/2013
03	CDE-OU1-NM1-G12-144	M2109-03A	10/31/2013	10/31/2013
04	CDE-OU1-NM1-F18-142	M2109-02A	10/31/2013	10/31/2013
05	CDE-OU1-NM1-H12-146	M2109-04A	11/01/2013	11/01/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NE	E4H5759F.D	10/31/2013	13:48	3.264	9.719
30	AR12543NE	E4H5760F.D	10/31/2013	14:31	3.265	9.721
31	MB-74527	E4H5763F.D	10/31/2013	15:30	3.261	9.712
32	LCS-74527	E4H5764F.D	10/31/2013	15:48	3.260	9.713
33	CDE-OU1-NM1-E18-140	E4H5765F.D	10/31/2013	16:06	3.261	9.712
34	CDE-OU1-NM1-G12-144	E4H5767F.D	10/31/2013	16:42	3.262	9.712
35	CDE-OU1-NM1-F18-142	E4H5768F.D	10/31/2013	17:00	3.261	9.710
36	AR16603NF	E4H5777F.D	10/31/2013	19:44	3.260	9.711
37	AR12543NF	E4H5778F.D	10/31/2013	20:02	3.261	9.711
38	AR16603NG	E4H5782F.D	11/1/2013	8:50	3.260	9.712
39	AR12543NG	E4H5784F.D	11/1/2013	10:41	3.264	9.715
40	CDE-OU1-NM1-H12-146	E4H5787F.D	11/1/2013	11:37	3.261	9.712
41	AR16603NH	E4H5789F.D	11/1/2013	12:13	3.261	9.711
42	AR12543NH	E4H5790F.D	11/1/2013	12:31	3.259	9.711

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NE	E4H5759R.D	10/31/2013	13:48	3.974	12.132
30	AR12543NE	E4H5760R.D	10/31/2013	14:31	3.973	12.131
31	MB-74527	E4H5763R.D	10/31/2013	15:30	3.978	12.132
32	LCS-74527	E4H5764R.D	10/31/2013	15:48	3.976	12.130
33	CDE-OU1-NM1-E18-140	E4H5765R.D	10/31/2013	16:06	3.977	12.132
34	CDE-OU1-NM1-G12-144	E4H5767R.D	10/31/2013	16:42	3.977	12.131
35	CDE-OU1-NM1-F18-142	E4H5768R.D	10/31/2013	17:00	3.976	12.129
36	AR16603NF	E4H5777R.D	10/31/2013	19:44	3.976	12.131
37	AR12543NF	E4H5778R.D	10/31/2013	20:02	3.977	12.127
38	AR16603NG	E4H5782R.D	11/1/2013	8:50	3.974	12.127
39	AR12543NG	E4H5784R.D	11/1/2013	10:41	3.975	12.128
40	CDE-OU1-NM1-H12-146	E4H5787R.D	11/1/2013	11:37	3.973	12.127
41	AR16603NH	E4H5789R.D	11/1/2013	12:13	3.977	12.131
42	AR12543NH	E4H5790R.D	11/1/2013	12:31	3.975	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/29/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

APPLICABLE QC CHECKLISTS

QC Inspector Name and Signature

ERIC TSCHUDI

Date

10/29/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/29/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY, COOL, 55°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT PCB SOIL SAMPLES FROM AREAS G AND H OF FIG. 1.

Description of Chemical Data Acquisition Work Performed: SAMPLES ANALYZED FOR TOTAL PCBs ~~INT~~ TO INCLUDE ADDITIONAL AROCLOR 1262, AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEMLABS VIA FEDEX SEE ATTACHED

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: SECONDARY SAMPLES COLLECTED AND WILL BE HELD PENDING PRIMARY SAMPLE RESULTS

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 10/29/13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/29/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? – TEMPERATURE BLANK	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? – SCANNED/EMAILED	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

10/29/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/29/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	Eric Tschudi	10/29/13
CQC Systems Manager	William Zambrano	[illegible]	10-29-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/01/13
TAT- Indicate Date Needed: 2DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS 4-1262, 1268	TEMPERATURE
	NM1-E18-140	10/23/13	1345	G	SO		1			X	
	NM1-F18-142	10/23/13	1415	G	SO		1			X	
	NM1-G12-144	10/29/13	1340	G	SO		1			X	
	NM1-H12-146	10/29/13	1415	G	SO		1			X	
	TEMP BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FEDEX	10/29/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 29OCT13
ActWgt: 15.0 LB
CAD: 102252634/NET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 30 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 7970 2837 8879
0201

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional charges along with the cancellation of your FedEx account and privileges.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797028378879
Ship date: 10/29/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

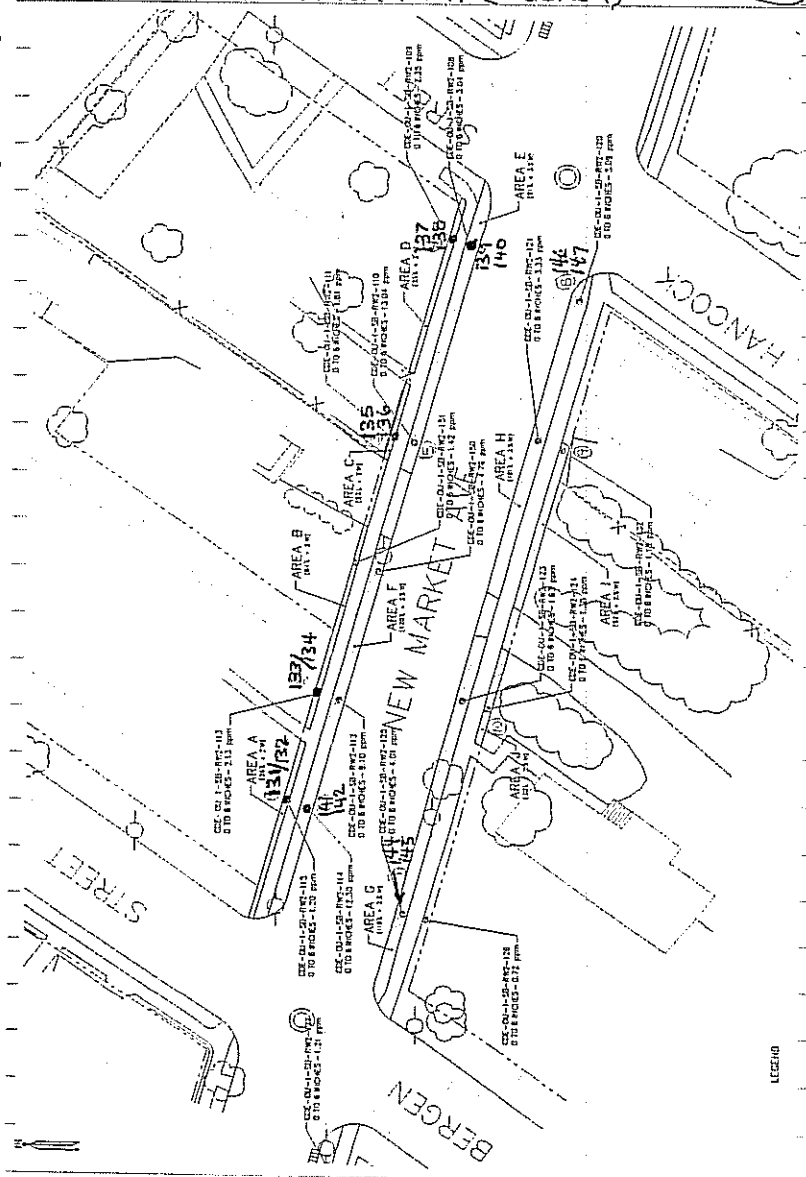
OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE	TIME	(CDE OU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/24 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140		
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142		
10/24	1500	NMRDW-143 (WC)		
10/29	1340	NM1-G12-144		
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146		
10/29	1430	NM1-H18-147		
10/30		NM1-I12-148		
10/30		NM1-I18-149		
10/30		NM1-J12-150		
10/30		NM1-J18-151		

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



10/21/13

80

OU1, NEWMARKET RIGHT OF WAY
PCB SOIL SAMPLING
10/29/13 SUNNY, COOL, 55°F.

1300 SET UP TO BEGIN SAMPLE OF NM1-G12.
AREA G - NEAR THE CORNER OF ~~HANCOCK~~ BERGEN ST
AND NEWMARKET AVE. ADVANCE AUGER
TO 12" BLS COLLECT SAMPLE:
~~14~~ 1340 CDE-OU1-NM1-G12-144.
ADVANCE AUGER TO 18" BLS COLLECT
1400: CDEOU1-NM1-G18-145.
MOVE TO AREA H TO COLLECT SAMPLES
ADVANCE HAND AUGER TO 12" BLS, COLLECT
1415 CDE-OU1-NM1-H12-146.
CONTINUE TO ADVANCE HAND AUGER
TO 18" BLS - SIGNIFICANT OBSTRUCTIONS -
STONES, ROCKS, DEBRIS - COAL LIKE MATERIAL
1430 COLLECT CDE-OU1-NM1-H18-147.
SAMPLES G12 AND H12 WILL BE PROCESSED,
LABELED, PACKED AND SHIPPED TO MITKEM
OVERNIGHT FOR TOTAL PCB ANALYSIS TO
INCLUDE ADDITIONAL AROCLORS 1262 AND 1268
ALSO WILL BE SHIPPING SAMPLES E18 AND
F18 - COLLECTED ON 10/23/13 - DUE TO THE
ANALYSIS RESULTS OVER 1 PPM PCB. SEE
SAMPLE LOG ON P.72. SEE P 75 FOR
LAB INFO.

Eric Faulkner
10/29/13

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-466

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
62	Info Sample NM1#142 & 146 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #142 failed criteria for PCB's at 1.40 ppm
Sample #146 failed criteria for PCB's at 1.40 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
15-Nov-13 14:45

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2109
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M2109-02	CDE-OU1-NM1-F18-142	Soil	23-Oct-13 14:15	30-Oct-13 10:30
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M2109-04	CDE-OU1-NM1-H12-146	Soil	29-Oct-13 14:15	30-Oct-13 10:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2109

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/18/13
Fax Due: 11/01/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2109-01A	CDE-OU1-NM1-E18-140	10/23/2013 13:45	10/30/2013	Soil	PMoist	/					B3
M2109-01A	CDE-OU1-NM1-E18-140	10/23/2013 13:45	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3
M2109-02A	CDE-OU1-NM1-F18-142	10/23/2013 14:15	10/30/2013	Soil	PMoist	/					B3
M2109-02A	CDE-OU1-NM1-F18-142	10/23/2013 14:15	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3
M2109-03A	CDE-OU1-NM1-G12-144	10/29/2013 13:40	10/30/2013	Soil	PMoist	/					B3
M2109-03A	CDE-OU1-NM1-G12-144	10/29/2013 13:40	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3
M2109-04A	CDE-OU1-NM1-H12-146	10/29/2013 14:15	10/30/2013	Soil	PMoist	/					B3
M2109-04A	CDE-OU1-NM1-H12-146	10/29/2013 14:15	10/30/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

10/31/2013 13:55

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F18-142

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2109-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H5768F.D/E4H5768R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 10/30/2013

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	370	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	1400	
11096-82-5	Aroclor-1260	370	U
37324-23-5	Aroclor-1262	370	U
11100-14-4	Aroclor-1268	370	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-H12-146

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: M2109

Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: M2109-04A

Sample wt/vol: 30.5 (g/mL) G

Lab File ID: E4H5787F.D/E4H5787R.D

% Moisture: 8.4 Decanted: (Y/N) N

Date Received: 10/30/2013

Extraction: (Type) SONC

Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00

Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	350	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	350	U
53469-21-9	Aroclor-1242	350	U
12672-29-6	Aroclor-1248	350	U
11097-69-1	Aroclor-1254	1400	
11096-82-5	Aroclor-1260	350	U
37324-23-5	Aroclor-1262	350	U
11100-14-4	Aroclor-1268	350	U

SW846

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74527

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5763F.D/E4H5763R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74527(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74527

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5764F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74527(2)

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: M2109

Mod. Ref No.: SDG No.: SM2109

Matrix: (SOIL/SED/WATER) SOIL

Lab Sample ID: LCS-74527

Sample wt/vol: 30 (g/mL) G

Lab File ID: E4H5764R.D

% Moisture: Decanted: (Y/N)

Date Received:

Extraction: (Type) SONC

Date Extracted: 10/30/2013

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 10/31/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74527	85	88	86	95			0
02	LCS-74527	82	85	86	96			0
03	CDE-OU1-NM1-E18-140	77	79	68	78			0
04	CDE-OU1-NM1-G12-144	77	74	65	71			0
05	CDE-OU1-NM1-F18-142	99	101	118	118			0
06	CDE-OU1-NM1-H12-146	101	101	105	126 D			1

QC LIMITS

(34-147)

(60-125)

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-74527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Lab Sample ID: LCS-74527 LCS Lot No.:

Date Extracted: 10/30/2013 Date Analyzed (1): 10/31/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	113.4909	85		40-140
Aroclor-1260	133.3330	117.1831	88		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 10/31/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	124.0066	93		40-140
Aroclor-1260	133.3330	137.9740	103		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74527

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

Lab File ID: E4H5763F.D / E4H5763R.D Lab Sample ID: MB-74527

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 10/30/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 10/31/2013 Date Analyzed (2): 10/31/2013

Time Analyzed (1): 15:30 Time Analyzed (2): 15:30

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74527	LCS-74527	10/31/2013	10/31/2013
02	CDE-OU1-NM1-E18-140	M2109-01A	10/31/2013	10/31/2013
03	CDE-OU1-NM1-G12-144	M2109-03A	10/31/2013	10/31/2013
04	CDE-OU1-NM1-F18-142	M2109-02A	10/31/2013	10/31/2013
05	CDE-OU1-NM1-H12-146	M2109-04A	11/01/2013	11/01/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NE	E4H5759F.D	10/31/2013	13:48	3.264	9.719
30	AR12543NE	E4H5760F.D	10/31/2013	14:31	3.265	9.721
31	MB-74527	E4H5763F.D	10/31/2013	15:30	3.261	9.712
32	LCS-74527	E4H5764F.D	10/31/2013	15:48	3.260	9.713
33	CDE-OU1-NM1-E18-140	E4H5765F.D	10/31/2013	16:06	3.261	9.712
34	CDE-OU1-NM1-G12-144	E4H5767F.D	10/31/2013	16:42	3.262	9.712
35	CDE-OU1-NM1-F18-142	E4H5768F.D	10/31/2013	17:00	3.261	9.710
36	AR16603NF	E4H5777F.D	10/31/2013	19:44	3.260	9.711
37	AR12543NF	E4H5778F.D	10/31/2013	20:02	3.261	9.711
38	AR16603NG	E4H5782F.D	11/1/2013	8:50	3.260	9.712
39	AR12543NG	E4H5784F.D	11/1/2013	10:41	3.264	9.715
40	CDE-OU1-NM1-H12-146	E4H5787F.D	11/1/2013	11:37	3.261	9.712
41	AR16603NH	E4H5789F.D	11/1/2013	12:13	3.261	9.711
42	AR12543NH	E4H5790F.D	11/1/2013	12:31	3.259	9.711

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2109 Mod. Ref No.: SDG No.: SM2109

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NE	E4H5759R.D	10/31/2013	13:48	3.974	12.132
30	AR12543NE	E4H5760R.D	10/31/2013	14:31	3.973	12.131
31	MB-74527	E4H5763R.D	10/31/2013	15:30	3.978	12.132
32	LCS-74527	E4H5764R.D	10/31/2013	15:48	3.976	12.130
33	CDE-OU1-NM1-E18-140	E4H5765R.D	10/31/2013	16:06	3.977	12.132
34	CDE-OU1-NM1-G12-144	E4H5767R.D	10/31/2013	16:42	3.977	12.131
35	CDE-OU1-NM1-F18-142	E4H5768R.D	10/31/2013	17:00	3.976	12.129
36	AR16603NF	E4H5777R.D	10/31/2013	19:44	3.976	12.131
37	AR12543NF	E4H5778R.D	10/31/2013	20:02	3.977	12.127
38	AR16603NG	E4H5782R.D	11/1/2013	8:50	3.974	12.127
39	AR12543NG	E4H5784R.D	11/1/2013	10:41	3.975	12.128
40	CDE-OU1-NM1-H12-146	E4H5787R.D	11/1/2013	11:37	3.973	12.127
41	AR16603NH	E4H5789R.D	11/1/2013	12:13	3.977	12.131
42	AR12543NH	E4H5790R.D	11/1/2013	12:31	3.975	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/29/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments
APPLICABLE QC CHECKLISTS

QC Inspector Name and Signature

ERIC TSCHODI

Date

10/29/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10/29/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY, COOL, 55°F.

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: LEVEL D PPE.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: COLLECT PCB SOIL SAMPLES FROM AREAS G AND H OF FIG. 1.

Description of Chemical Data Acquisition Work Performed: SAMPLES ANALYZED FOR TOTAL PCBs ~~INT~~ TO INCLUDE ADDITIONAL AROCLOR 1262, AND 1268.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEMLABS VIA FEDEX SEE ATTACHED

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: SECONDARY SAMPLES COLLECTED AND WILL BE HELD PENDING PRIMARY SAMPLE RESULTS

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10/29/13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/29/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? – TEMPERATURE BLANK	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? – SCANNED/EMAILED	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSEHUDI

Eric Tsehudi

Date

10/29/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10/29/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____
Name Signature Date

QC Reviewer ERIC TSCHUDI _____ 10/29/13
Name Signature Date

CQC Systems Manager William Zambrano _____ 10-29-13
Name Signature Date

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/01/13
TAT- Indicate Date Needed: 2DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
533 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic

Analyses: TOTAL PCBS 1-1262, 1266; TEMPERATURE

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS 1-1262, 1266	TEMPERATURE							
	NM1-E18-140	10/23/13	1345	G	SO		1			X								
	NM1-F18-142	10/23/13	1415	G	SO		1			X								
	NM1-G12-144	10/29/13	1340	G	SO		1			X								
	NM1-H12-146	10/29/13	1415	G	SO		1			X								
	TEMP BLANK										X							

Relinquished by:	Received by:	Date:	Time:	Temp°C
RICK TSCHUDI	FEDEX	10/29/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 29OCT13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

WED - 30 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 7970 2837 8879
0201

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account privileges.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797028378879
Ship date: 10/29/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

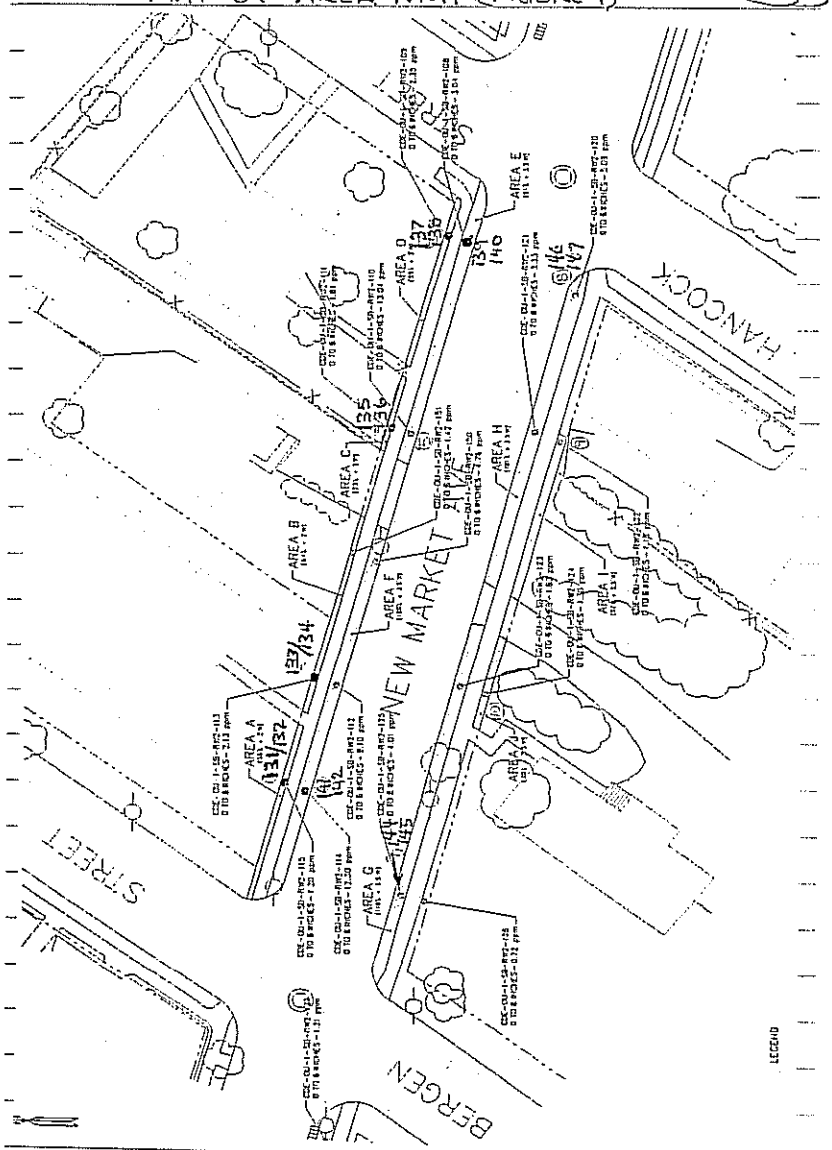
OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE	TIME	(ODE OU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/24 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140		
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142		
10/24	1500	NMROW-143 (WC)		
10/29	1340	NM1-G12-144		
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146		
10/29	1430	NM1-H18-147		
10/30		NM1-I12-148		
10/30		NM1-I18-149		
10/30		NM1-J12-150		
10/30		NM1-J18-151		

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



[signature] 10/21/13

80

OUI, NEWMARKET RIGHT OF WAY
PCB SOIL SAMPLING
10/29/13 SUNNY, COOL, 55°F.

1300 SET UP TO BEGIN SAMPLE OF NMI-G12.
AREA G - NEAR THE CORNER OF ~~HANCOCK~~ BERGEN ST
AND NEWMARKET AVE. ADVANCE AUGER
TO 12" BLS COLLECT SAMPLE!
1340 CDE-OUI-NMI-G12-144.
ADVANCE AUGER TO 18" BLS COLLECT
1400: CDEOUI-NMI-G18-145.
MOVE TO AREA H TO COLLECT SAMPLES
ADVANCE HAND AUGER TO 12" BLS, COLLECT
1415 CDE-OUI-NMI-H12-146.
CONTINUE TO ADVANCE HAND AUGER
TO 18" BLS - SIGNIFICANT OBSTRUCTIONS -
STONES, ROCKS, DEBRIS - COAL LIKE MATERIAL
1430 COLLECT CDE-OUI-NMI-H18-147.
SAMPLES G12 AND H12 WILL BE PROCESSED,
LABELED, PACKED AND SHIPPED TO MITKEM
OVERNIGHT FOR TOTAL PCB ANALYSIS TO
INCLUDE ADDITIONAL AROCLORS 1262 AND 1268
ALSO WILL BE SHIPPING SAMPLES G18 AND
F18 - COLLECTED ON 10/23/13 - DUE TO THE
ANALYSIS RESULTS OVER 1 PPM PCB. SEE
SAMPLE LOG ON P.72. SEE P 75 FOR
LAB INFO.

10/29/13

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-467

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
63	Info Sample NM1#148 & NM2#152 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #148 failed criteria for PCB's at 2.20 ppm
Sample #152 failed criteria for PCB's at 2.40 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
15-Nov-13 14:15

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2116
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2116-01	CDE-OU1-NM1-I12-148	Soil	30-Oct-13 10:30	31-Oct-13 10:22
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M2116-03	CDE-OU1-NM2-A12-152	Soil	30-Oct-13 13:30	31-Oct-13 10:22
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2116

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/19/13
Fax Due: 11/04/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2116-01A	CDE-OU1-NM1-I12-148	10/30/2013 10:30	10/31/2013	Soil	PMoist	/					J2
M2116-01A	CDE-OU1-NM1-I12-148	10/30/2013 10:30	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2
M2116-02A	CDE-OU1-NM1-J12-150	10/30/2013 11:00	10/31/2013	Soil	PMoist	/					J2
M2116-02A	CDE-OU1-NM1-J12-150	10/30/2013 11:00	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2
M2116-03A	CDE-OU1-NM2-A12-152	10/30/2013 13:30	10/31/2013	Soil	PMoist	/					J2
M2116-03A	CDE-OU1-NM2-A12-152	10/30/2013 13:30	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2
M2116-04A	CDE-OU1-NM2-B12-154	10/30/2013 14:00	10/31/2013	Soil	PMoist	/					J2
M2116-04A	CDE-OU1-NM2-B12-154	10/30/2013 14:00	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

10/31/2013 14:08

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2116

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-I12-148 (M2116-01A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 125% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-I12-148 (M2116-01A) : Dilution Factor: 10
CDE-OU1-NM2-A12-152 (M2116-03A) : Dilution Factor: 10

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to

compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/15/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-001-NM1-I12-148

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2116-01A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H5797F.D/E4H5797R.D

% Moisture: 7.0 Decanted: (Y/N) N Date Received: 10/31/2013

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND .	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	350	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	350	U
53469-21-9	Aroclor-1242	350	U
12672-29-6	Aroclor-1248	350	U
11097-69-1	Aroclor-1254	2200	
11096-82-5	Aroclor-1260	350	U
37324-23-5	Aroclor-1262	350	U
11100-14-4	Aroclor-1268	350	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM2-A12-152

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2116-03A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5800F.D/E4H5800R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 10/31/2013

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	370	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	2400	
11096-82-5	Aroclor-1260	370	U
37324-23-5	Aroclor-1262	370	U
11100-14-4	Aroclor-1268	370	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74546

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74546

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5793F.D/E4H5793R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74546(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74546

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5794F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74546(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74546

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5794R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74546	87	92	87	100			0
02	LCS-74546	85	90	82	97			0
03	CDE-OU1-NM1-J12-150	75	78	69	77			0
04	CDE-OU1-NM1-I12-148	97	101	109	125 D			1
05	CDE-OU1-NM2-B12-154	83	84	67	81			0
06	CDE-OU1-NM2-A12-152	90	97	107	115			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-74546

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Lab Sample ID: LCS-74546 LCS Lot No.:

Date Extracted: 10/31/2013 Date Analyzed (1): 11/01/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	110.4985	83		40-140
Aroclor-1260	133.3330	110.4986	83		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/01/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	123.3456	93		40-140
Aroclor-1260	133.3330	135.4974	102		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.21.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74546

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Lab File ID: E4H5793F.D / E4H5793R.D Lab Sample ID: MB-74546

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 10/31/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/01/2013 Date Analyzed (2): 11/01/2013

Time Analyzed (1): 13:34 Time Analyzed (2): 13:34

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74546	LCS-74546	11/01/2013	11/01/2013
02	CDE-OU1-NM1-J12-150	M2116-02A	11/01/2013	11/01/2013
03	CDE-OU1-NM1-I12-148	M2116-01A	11/01/2013	11/01/2013
04	CDE-OU1-NM2-B12-154	M2116-04A	11/01/2013	11/01/2013
05	CDE-OU1-NM2-A12-152	M2116-03A	11/01/2013	11/01/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NH	E4H5789F.D	11/1/2013	12:13	3.261	9.711
30	AR12543NH	E4H5790F.D	11/1/2013	12:31	3.259	9.711
31	MB-74546	E4H5793F.D	11/1/2013	13:34	3.265	9.718
32	LCS-74546	E4H5794F.D	11/1/2013	13:52	3.260	9.712
33	CDE-OU1-NM1-J12-150	E4H5796F.D	11/1/2013	14:28	3.261	9.711
34	CDE-OU1-NM1-I12-148	E4H5797F.D	11/1/2013	14:46	3.260	9.711
35	CDE-OU1-NM2-B12-154	E4H5799F.D	11/1/2013	15:23	3.260	9.711
36	CDE-OU1-NM2-A12-152	E4H5800F.D	11/1/2013	15:41	3.259	9.710
37	AR16603NI	E4H5808F.D	11/1/2013	18:06	3.261	9.711
38	AR12543NI	E4H5809F.D	11/1/2013	18:24	3.260	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

BH - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NH	E4H5789R.D	11/1/2013	12:13	3.977	12.131
30	AR12543NH	E4H5790R.D	11/1/2013	12:31	3.975	12.127
31	MB-74546	E4H5793R.D	11/1/2013	13:34	3.974	12.126
32	LCS-74546	E4H5794R.D	11/1/2013	13:52	3.974	12.129
33	CDE-OU1-NM1-J12-150	E4H5796R.D	11/1/2013	14:28	3.976	12.127
34	CDE-OU1-NM1-I12-148	E4H5797R.D	11/1/2013	14:46	3.975	12.128
35	CDE-OU1-NM2-B12-154	E4H5799R.D	11/1/2013	15:23	3.976	12.129
36	CDE-OU1-NM2-A12-152	E4H5800R.D	11/1/2013	15:41	3.975	12.127
37	AR16603NI	E4H5808R.D	11/1/2013	18:06	3.977	12.128
38	AR12543NI	E4H5809R.D	11/1/2013	18:24	3.976	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-30-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments
Applicable QC Checklist

QC Inspector Name and Signature
Davis Rauer JR
DRR

Date
10-30-13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-30-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? Scanned / Email	X			

Notes/Comments

QC Inspector Name and Signature

Davis Rauer

Date

10-30-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-30-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver	[signature]	10-30-13
CQC Systems Manager	William Zambrana	[signature]	10-30-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/04/13

TAT- Indicate Date Needed: 2DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 9024 (G278) RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State-specific reporting standards:

Lab Id:	CDE-OU1 Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS 1262, 1268	TEMP
	NM1-I12-148	10/30/13	1030	G	SO		1			X	
	NM1-J12-150	10/30/13	1100	G	SO		1			X	
	NM2-A12-152	10/30/13	1330	G	SO		1			X	
	NM2-B12-154	10/30/13	1400	G	SO		1			X	
	TEMP BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FED EX	10/30/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 30OCT13
ActWgt: 30.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 31 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 7970 3922 0411
0201

ED NCOA

02852
RI-US
PVD

5IAG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797039220411
Ship date: 10/30/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 30 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

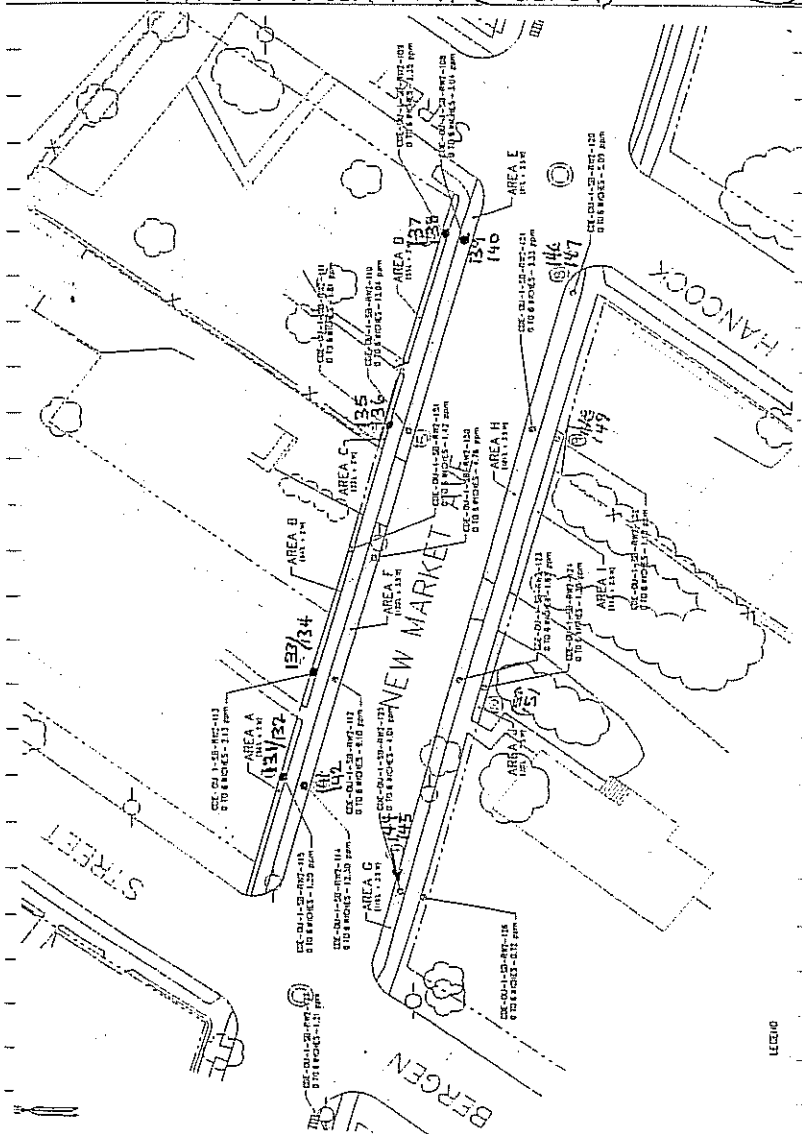
(2013) DATE/TIME	(CDEQUI-) SAMPLE CODE	MITICEM REPORT #	RESULT
10/21 1400	NM1-A12-131	10/24 M2034	ND
10/21 1415	NM1-A18-132		
10/21 1430	NM1-B12-133	M2034	ND
10/21 1445	NM1-B18-134		
10/22 1330	NM1-C12-135	10/25 M2047	0.210
10/22 1345	NM1-C18-136		
10/22 1400	NM1-D12-137	M2047	0.290
10/22 1415	NM1-D18-138		
10/23 1330	NM1-E12-139	10/28 M2063	1.200
10/23 1345	NM1-E18-140		
10/23 1400	NM1-F12-141	M2063	2.600
10/23 1415	NM1-F18-142		
10/24 1500	NMROW-143 (WC)		
10/29 1340	NM1-G12-144		
10/29 1400	NM1-G18-145		
10/29 1415	NM1-H12-146		
10/29 1430	NM1-H18-147		
10/30 1030	NM1-I12-148		
10/30 1045	NM1-I18-149		
10/30 1100	NM1-J12-150		
10/30 1115	NM1-J18-151		

SAMPLE LOG CONTINUED ON P. 82.
SAMPLE MAP CONTINUED ON P. 83.

10/30/13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



10/21/13

OU1, NEWMARKET RIGHT OF WAY
FOR SOIL SAMPLING

10/30/13 (81)

1000 E. TSCHUDI AND D. RAVER MOVE TO DRIVEWAY
OF 211 NEWMARKET AVE. TO SETUP FOR
SAMPLES AT AREAS I AND J OF FIG 1.
OVERCAST, 50°F. BEGIN ADVANCING AUGER
AT AREA I SAMPLE LOCATION.
1030 COLLECT CDE-OU1-NM1-I12-148
CONTINUE TO ADVANCE AUGER TO 18"
1045 COLLECT CDE-OU1-NM1-I18-149
MOVE TO AREA J. WITH CLEAN AUGER BUCKET.
BEGIN TO ADVANCE AUGER TO 12" BLS.
1100 COLLECT CDE-OU1-NM1-J12-150
~~MOVE~~ CONTINUE TO ADVANCE AUGER TO 18"
1115 COLLECT CDE-OU1-NM1-J18-151.
BACK TO TRAILER - BREAK FOR LUNCH
1315 E. TSCHUDI AND D. RAVER SETUP AT
FIG. 2 AREA A LOCATION TO RESUME SAMPLING.
SEE P. 82, 83 FOR SAMPLE LOG AND SAMPLE
LOCATION MAP.
1330 COLLECT CDE-OU1-NM2-A12-152 AT 12" BLS.
ADVANCE AUGER TO 18" BLS AT AREA A FOR
1340 COLLECT CDE-OU1-NM2-A18-153 AT 18".
MOVE TO AREA B IN NM2.
BEGIN AUGER TO 12" FOR SAMPLE.
1400 COLLECT CDE-OU1-NM2-B12-~~153~~ 154
1415 COLLECT CDE-OU1-NM2-B18-155.

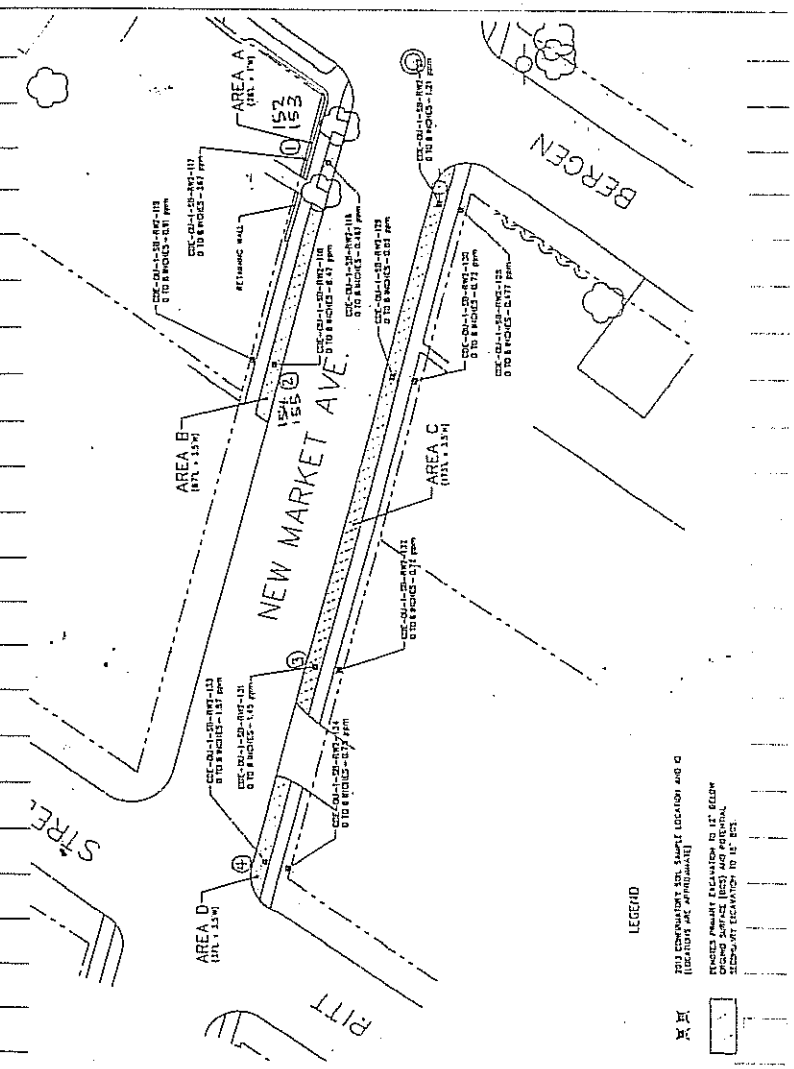
82

OU1, NEWMARKET RIGHT OF WAY
FIG 2/NM2 SAMPLE ~~MAP~~ LOG

DATE/TIME	(CDE-OU1-) SAMPLE CODE	MITIGEM REPORT#	RESULT
10/30 1330	NM2-A12-152		
10/30 1340	NM2-A18-153		
10/30 1400	NM2-B12-154		
10/30 1415	NM2-B18-155		

OU1 NEW MARKET RIGHT OF WAY
FIG 2/NM2 SAMPLE MAP

83



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 01450A-468

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
64	Final Sample NM1#150 & NM2#154 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #150 passed criteria for PCB's at 0.062 ppm,
Sample #154 passed criteria for PCB's at 0.390 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
15-Nov-13 14:15

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2116
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]				
M2116-02	CDE-OU1-NM1-J12-150	Soil	30-Oct-13 11:00	31-Oct-13 10:22
[redacted]				
M2116-04	CDE-OU1-NM2-B12-154	Soil	30-Oct-13 14:00	31-Oct-13 10:22

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2116

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/19/13
Fax Due: 11/04/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2116-01A	CDE-OU1-NM1-I12-148	10/30/2013 10:30	10/31/2013	Soil	PMoist	/					J2
M2116-01A	CDE-OU1-NM1-I12-148	10/30/2013 10:30	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2
M2116-02A	CDE-OU1-NM1-J12-150	10/30/2013 11:00	10/31/2013	Soil	PMoist	/					J2
M2116-02A	CDE-OU1-NM1-J12-150	10/30/2013 11:00	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2
M2116-03A	CDE-OU1-NM2-A12-152	10/30/2013 13:30	10/31/2013	Soil	PMoist	/					J2
M2116-03A	CDE-OU1-NM2-A12-152	10/30/2013 13:30	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2
M2116-04A	CDE-OU1-NM2-B12-154	10/30/2013 14:00	10/31/2013	Soil	PMoist	/					J2
M2116-04A	CDE-OU1-NM2-B12-154	10/30/2013 14:00	10/31/2013	Soil	SW8082_S	/ + AR1262,1268				Y	J2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

10/31/2013 14:08

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2116

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-I12-148 (M2116-01A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 125% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-I12-148 (M2116-01A) : Dilution Factor: 10
CDE-OU1-NM2-A12-152 (M2116-03A) : Dilution Factor: 10

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to

compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/15/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-J12-150

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2116-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5796F.D/E4H5796R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 10/31/2013

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	62	P
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM2-B12-154

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2116-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5799F.D/E4H5799R.D

% Moisture: 7.0 Decanted: (Y/N) N Date Received: 10/31/2013

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	390	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74546

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74546

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5793F.D/E4H5793R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74546(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74546

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5794F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74546(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74546

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5794R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 10/31/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74546	87	92	87	100			0
02	LCS-74546	85	90	82	97			0
03	CDE-OU1-NM1-J12-150	75	78	69	77			0
04	CDE-OU1-NM1-I12-148	97	101	109	125 D			1
05	CDE-OU1-NM2-B12-154	83	84	67	81			0
06	CDE-OU1-NM2-A12-152	90	97	107	115			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74546

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Lab Sample ID: LCS-74546 LCS Lot No.:

Date Extracted: 10/31/2013 Date Analyzed (1): 11/01/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	110.4985	83		40-140
Aroclor-1260	133.3330	110.4986	83		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/01/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	123.3456	93		40-140
Aroclor-1260	133.3330	135.4974	102		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74546

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

Lab File ID: E4H5793F.D / E4H5793R.D Lab Sample ID: MB-74546

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 10/31/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/01/2013 Date Analyzed (2): 11/01/2013

Time Analyzed (1): 13:34 Time Analyzed (2): 13:34

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74546	LCS-74546	11/01/2013	11/01/2013
02	CDE-OU1-NM1-J12-150	M2116-02A	11/01/2013	11/01/2013
03	CDE-OU1-NM1-I12-148	M2116-01A	11/01/2013	11/01/2013
04	CDE-OU1-NM2-B12-154	M2116-04A	11/01/2013	11/01/2013
05	CDE-OU1-NM2-A12-152	M2116-03A	11/01/2013	11/01/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NH	E4H5789F.D	11/1/2013	12:13	3.261	9.711
30	AR12543NH	E4H5790F.D	11/1/2013	12:31	3.259	9.711
31	MB-74546	E4H5793F.D	11/1/2013	13:34	3.265	9.718
32	LCS-74546	E4H5794F.D	11/1/2013	13:52	3.260	9.712
33	CDE-OU1-NM1-J12-150	E4H5796F.D	11/1/2013	14:28	3.261	9.711
34	CDE-OU1-NM1-I12-148	E4H5797F.D	11/1/2013	14:46	3.260	9.711
35	CDE-OU1-NM2-B12-154	E4H5799F.D	11/1/2013	15:23	3.260	9.711
36	CDE-OU1-NM2-A12-152	E4H5800F.D	11/1/2013	15:41	3.259	9.710
37	AR16603NI	E4H5808F.D	11/1/2013	18:06	3.261	9.711
38	AR12543NI	E4H5809F.D	11/1/2013	18:24	3.260	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2116 Mod. Ref No.: SDG No.: SM2116

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NH	E4H5789R.D	11/1/2013	12:13	3.977	12.131
30	AR12543NH	E4H5790R.D	11/1/2013	12:31	3.975	12.127
31	MB-74546	E4H5793R.D	11/1/2013	13:34	3.974	12.126
32	LCS-74546	E4H5794R.D	11/1/2013	13:52	3.974	12.129
33	CDE-OU1-NM1-J12-150	E4H5796R.D	11/1/2013	14:28	3.976	12.127
34	CDE-OU1-NM1-I12-148	E4H5797R.D	11/1/2013	14:46	3.975	12.128
35	CDE-OU1-NM2-B12-154	E4H5799R.D	11/1/2013	15:23	3.976	12.129
36	CDE-OU1-NM2-A12-152	E4H5800R.D	11/1/2013	15:41	3.975	12.127
37	AR16603NI	E4H5808R.D	11/1/2013	18:06	3.977	12.128
38	AR12543NI	E4H5809R.D	11/1/2013	18:24	3.976	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-30-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments
Applicable QC Checklist

QC Inspector Name and Signature
Davis Rauer JR
DRR

Date
10-30-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 10-30-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Overcast, 50°F

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: Sample Areas NM1 I, J. NM2 A, B.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped to MitKem LAB via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: Secondary Samples Collected, Will be sent to Lab pending Results of Primary Samples

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

10-30-13

Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-30-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? Scanned / Email	X			

Notes/Comments

QC Inspector Name and Signature

Davis Rauer

Date

10-30-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-30-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Rauer		10-30-13
CQC Systems Manager	William Zaadstraa		10-30-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/04/13

TAT- Indicate Date Needed: 2DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP
	NM1-I12-148	10/30/13	1030	G	SO		1			X	
	NM1-J12-150	10/30/13	1100	G	SO		1			X	
	NM2-A12-152	10/30/13	1330	G	SO		1			X	
	NM2-B12-154	10/30/13	1400	G	SO		1			X	
	TEMP BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FED EX	10/30/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 30OCT13
ActWgt: 30.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 31 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7970 3922 0411

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797039220411
Ship date: 10/30/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 30 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE	TIME	(CDE OU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/25 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140		
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142		
10/24	1500	NMROW-143 (WC)		
10/29	1340	NM1-G12-144		
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146		
10/29	1430	NM1-H18-147		
10/30	1030	NM1-I12-148		
10/30	1045	NM1-I18-149		
10/30	1100	NM1-J12-150		
10/30	1115	NM1-J18-151		

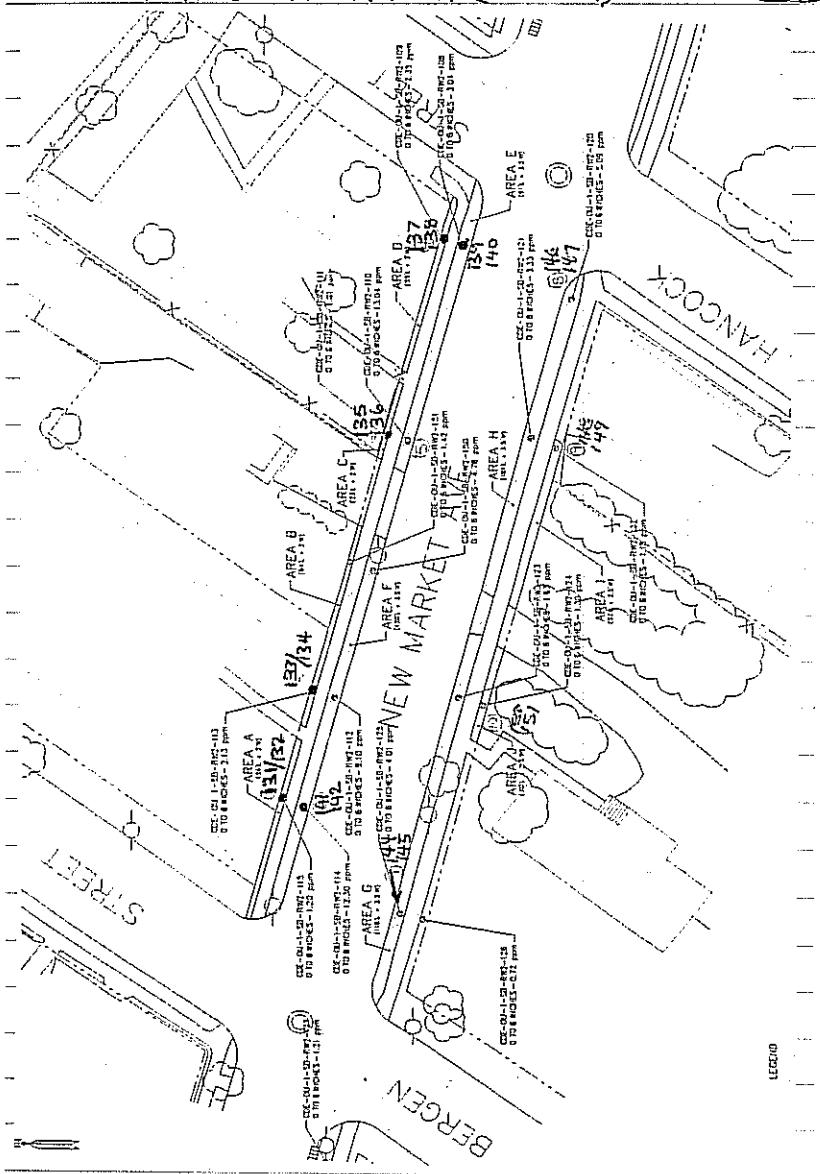
SAMPLE LOG CONTINUED ON P. 82

SAMPLE MAP CONTINUED ON P. 83.

10/30/13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



10/21/13

"Rite in the Rain"

OU1, NEWMARKET RIGHT OF WAY
FOR SOIL SAMPLING

10/30/13 (81)

1000 E. TSCHUDI AND D. RAVER MOVE TO DRIVEWAY
OF 211 NEWMARKET AVE. TO SETUP FOR
SAMPLES AT AREAS I AND J OF FIG 1.
OVERCAST, 50°F. BEGIN ADVANCING AUGER
AT AREA I SAMPLE LOCATION.
1030 COLLECT CDE-OU1-NM1 I12-148
CONTINUE TO ADVANCE AUGER TO 18"
1045 COLLECT CDE-OU1-NM1-I18-149
MOVE TO AREA J. WITH CLEAN AUGER BUCKET.
BEGIN TO ADVANCE AUGER TO 12" BLS.
1100 COLLECT CDE-OU1-NM1-J12-150
~~MOVE~~ CONTINUE TO ADVANCE AUGER TO 18"
1115 COLLECT CDE-OU1-NM1-J18-151.
BACK TO TRAILER - BREAK FOR LUNCH
1315 E. TSCHUDI AND D. RAVER SETUP AT
FIG. 2 AREA A LOCATION TO RESUME SAMPLING.
SEE P. 82, 83 FOR SAMPLE LOG AND SAMPLE
LOCATION MAP.
1330 COLLECT CDE-OU1-NM2-A12-152 AT 12" BLS.
ADVANCE AUGER TO 18" BLS AT AREA A FOR
1340 COLLECT CDE-OU1-NM2-A18-153 AT 18".
MOVE TO AREA B IN NM2.
BEGIN AUGER TO 12" FOR SAMPLE.
1400 COLLECT CDE-OU1-NM2-B12-~~153~~ 154
1415 COLLECT CDE-OU1-NM2-B18-155.

Rain the Rain

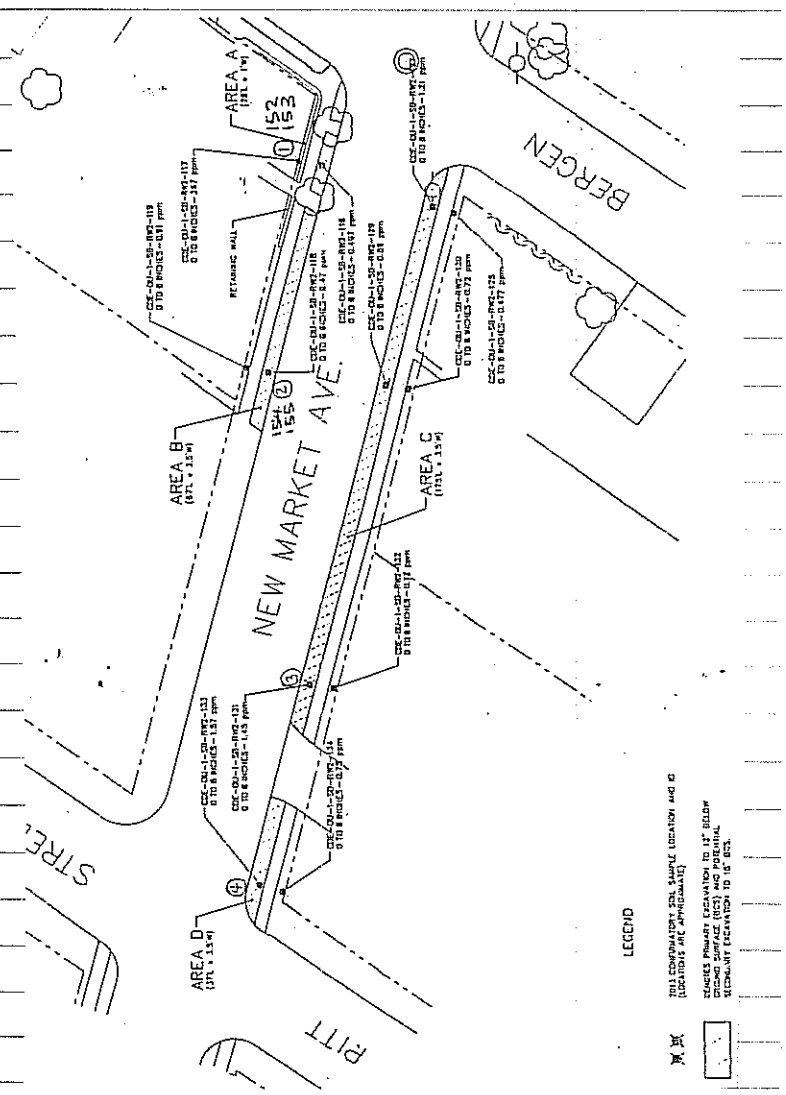
82

OU1, NEWMARKET RIGHT OF WAY
FIG 2/NM2 SAMPLE ~~MAP~~ LOG

DATE/TIME	(CDE-OU1-) SAMPLE CODE	MITKEAG REPORT#	RESULT
10/30 1330	NM2-A12-152		
10/30 1340	NM2-A18-153		
10/30 1400	NM2-B12-154		
10/30 1415	NM2-B18-155		

OU1 NEW MARKET RIGHT OF WAY
FIG 2/NM2 SAMPLE MAP

83



"Rite in the Rain"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/21/2013

TRANSMITTAL NO.: 01450A-470

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
65	Final Sample NM2,3#156, 158, 160, 162	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #156 passed criteria for PCB's at 0.120 ppm,
Sample #158 passed criteria for PCB's at 0.170 ppm,
Sample #160 passed criteria for PCB's at 0.180 ppm,
Sample #162 passed criteria for PCB's at 0.560 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
20-Nov-13 13:33

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2134
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2134-01	CDE-OU1-NM2-C12-156	Soil	31-Oct-13 10:45	01-Nov-13 10:10
M2134-02	CDE-OU1-NM2-D12-158	Soil	31-Oct-13 11:15	01-Nov-13 10:10
M2134-03	CDE-OU1-NM3-A12-160	Soil	31-Oct-13 13:45	01-Nov-13 10:10
M2134-04	CDE-OU1-NM3-B12-162	Soil	31-Oct-13 14:15	01-Nov-13 10:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2134

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/20/13
Fax Due: 11/05/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2134-01A	CDE-OU1-NM2-C12-156	10/31/2013 10:45	11/01/2013	Soil	PMoist	/					D3
M2134-01A	CDE-OU1-NM2-C12-156	10/31/2013 10:45	11/01/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2134-02A	CDE-OU1-NM2-D12-158	10/31/2013 11:15	11/01/2013	Soil	PMoist	/					D3
M2134-02A	CDE-OU1-NM2-D12-158	10/31/2013 11:15	11/01/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2134-03A	CDE-OU1-NM3-A12-160	10/31/2013 13:45	11/01/2013	Soil	PMoist	/					D3
M2134-03A	CDE-OU1-NM3-A12-160	10/31/2013 13:45	11/01/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2134-04A	CDE-OU1-NM3-B12-162	10/31/2013 14:15	11/01/2013	Soil	PMoist	/					D3
M2134-04A	CDE-OU1-NM3-B12-162	10/31/2013 14:15	11/01/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/04/2013 09:01

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2134

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM3-B12-162 (M2134-04A) : Dilution Factor: 5

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/20/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-NM2-C12-156

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2134-01A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H5803F.D/E4H5803R.D

% Moisture: 7.5 Decanted: (Y/N) N Date Received: 11/01/2013

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	120	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-NM2-D12-158

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2134-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H5804F.D/E4H5804R.D

% Moisture: 8.1 Decanted: (Y/N) N Date Received: 11/01/2013

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	170	P
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-NM3-A12-160

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2134-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H5805F.D/E4H5805R.D

% Moisture: 7.1 Decanted: (Y/N) N Date Received: 11/01/2013

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	180	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-NM3-B12-162

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2134-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5819F.D/E4H5819R.D

% Moisture: 9.2 Decanted: (Y/N) N Date Received: 11/01/2013

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/04/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	560	
11096-82-5	Aroclor-1260	180	U
37324-23-5	Aroclor-1262	180	U
11100-14-4	Aroclor-1268	180	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-74567

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74567

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5801F.D/E4H5801R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-74567(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74567

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5802F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-74567(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74567

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5802R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/01/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/01/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	130	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74567	84		90		83		95				0
02	LCS-74567	85		88		81		93				0
03	CDE-OU1-NM2-C12-156	80		83		71		83				0
04	CDE-OU1-NM2-D12-158	80		81		66		80				0
05	CDE-OU1-NM3-A12-160	75		74		63		66				0
06	CDE-OU1-NM3-B12-162	76		77		74		85				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-74567

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Lab Sample ID: LCS-74567 LCS Lot No.:

Date Extracted: 11/01/2013 Date Analyzed (1): 11/01/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	115.8561	87		40-140
Aroclor-1260	133.3330	116.0247	87		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/01/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	127.2860	95		40-140
Aroclor-1260	133.3330	140.1317	105		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.21.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-74567

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

Lab File ID: E4H5801F.D / E4H5801R.D Lab Sample ID: MB-74567

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/01/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/01/2013 Date Analyzed (2): 11/01/2013

Time Analyzed (1): 15:59 Time Analyzed (2): 15:59

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74567	LCS-74567	11/01/2013	11/01/2013
02	CDE-OU1-NM2-C12-156	M2134-01A	11/01/2013	11/01/2013
03	CDE-OU1-NM2-D12-158	M2134-02A	11/01/2013	11/01/2013
04	CDE-OU1-NM3-A12-160	M2134-03A	11/01/2013	11/01/2013
05	CDE-OU1-NM3-B12-162	M2134-04A	11/04/2013	11/04/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NH	E4H5789F.D	11/1/2013	12:13	3.261	9.711
30	AR12543NH	E4H5790F.D	11/1/2013	12:31	3.259	9.711
31	MB-74567	E4H5801F.D	11/1/2013	15:59	3.260	9.710
32	LCS-74567	E4H5802F.D	11/1/2013	16:17	3.259	9.711
33	CDE-OU1-NM2-C12-156	E4H5803F.D	11/1/2013	16:35	3.259	9.711
34	CDE-OU1-NM2-D12-158	E4H5804F.D	11/1/2013	16:53	3.261	9.711
35	CDE-OU1-NM3-A12-160	E4H5805F.D	11/1/2013	17:11	3.260	9.709
36	AR16603NI	E4H5808F.D	11/1/2013	18:06	3.261	9.711
37	AR12543NI	E4H5809F.D	11/1/2013	18:24	3.260	9.710
38	AR16603NJ	E4H5815F.D	11/4/2013	9:54	3.265	9.723
39	AR12543NJ	E4H5816F.D	11/4/2013	10:17	3.264	9.720
40	CDE-OU1-NM3-B12-162	E4H5819F.D	11/4/2013	11:34	3.260	9.714
41	AR16603NK	E4H5821F.D	11/4/2013	12:10	3.260	9.713
42	AR12543NK	E4H5822F.D	11/4/2013	12:28	3.260	9.714

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2134 Mod. Ref No.: SDG No.: SM2134

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	CLIENT SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NH	E4H5789R.D	11/1/2013	12:13	3.977	12.131
30	AR12543NH	E4H5790R.D	11/1/2013	12:31	3.975	12.127
31	MB-74567	E4H5801R.D	11/1/2013	15:59	3.976	12.130
32	LCS-74567	E4H5802R.D	11/1/2013	16:17	3.975	12.128
33	CDE-OU1-NM2-C12-156	E4H5803R.D	11/1/2013	16:35	3.974	12.126
34	CDE-OU1-NM2-D12-158	E4H5804R.D	11/1/2013	16:53	3.977	12.129
35	CDE-OU1-NM3-A12-160	E4H5805R.D	11/1/2013	17:11	3.975	12.127
36	AR16603NI	E4H5808R.D	11/1/2013	18:06	3.977	12.128
37	AR12543NI	E4H5809R.D	11/1/2013	18:24	3.976	12.127
38	AR16603NJ	E4H5815R.D	11/4/2013	9:54	3.972	12.132
39	AR12543NJ	E4H5816R.D	11/4/2013	10:17	3.974	12.134
40	CDE-OU1-NM3-B12-162	E4H5819R.D	11/4/2013	11:34	3.975	12.134
41	AR16603NK	E4H5821R.D	11/4/2013	12:10	3.977	12.133
42	AR12543NK	E4H5822R.D	11/4/2013	12:28	3.976	12.135

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-31-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?			
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments Applicable QC Checklist

QC Inspector Name and Signature

Davis Raker JR

DRR

Date

10-31-13

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: _____

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? Scanned/Email	X			

Notes/Comments

_____

_____

_____

QC Inspector Name and Signature

Davis Raven

DR

Date

10-31-13

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 10-31-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver	[signature]	10-31-13
CQC Systems Manager	[illegible]	[signature]	10-31-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/05/13

TAT- Indicate Date Needed: 2DAYS

- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-001-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	TEMP
	NM2-C12-156	10/31/13	1045	G	SO		1			X	
	NM2-D12-158	10/31/13	1115	G	SO		1			X	
	NM3-A12-160	10/31/13	1345	G	SO		1			X	
	NM3-B12-162	10/31/13	1415	G	SO		1			X	
	TEMPERATURE BLANK										X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FEDEX	10/31/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
E.TSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 31OCT13
ActWgt: 25.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 01 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7970 5056 1241
0201

ED NCOA

02852
RI-US
PVD

51AG1/AB1B/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797050561241
Ship date: 10/31/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 of

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2015 -

(84) OUI, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING. 10/31/13

WEATHER: COMPLETELY OVERCAST, 60°F.
FORECAST IS FOR RAIN LATER IN THE DAY.
0800 E. TSCHUDI AND D. RAVER PREPARE TO
RESUME PCB SOIL SAMPLING. PLANNING
NEXT SAMPLING AREA TO BE NM2 (FIG. 2).
AREAS C AND D. AS PREVIOUSLY DONE
THE SAMPLES WILL BE COLLECTED BY USING
A STAINLESS STEEL AUGER BUCKET TO
COLLECT SOIL AT 2 INTERVALS PER
SAMPLE LOCATION, ONE AT 12" AND THE SECOND
AT 18".
~~1080~~ SET UP TO SAMPLE AREA C AS PART OF
NM2 - OR - FIGURE 2. ADVANCE AUGER TO 12"
~~1000~~ 1045 COLLECT CDE-OUI-NM2-C12-156.
CONTINUE IN SAME HOLE TO ADVANCE
AUGER TO 18" BLS.
1100 COLLECT CDE-OUI-NM2-C18-157.
MOVE TO AREA D WITH CLEAN AUGER
BUCKET BEGIN ADVANCING AUGER TO
12" BLS.
1115 COLLECT CDE-OUI-NM2-D12-158.
MOVE TO TRAILERS TO BREAK FOR LUNCH.
1305 MOVE TO EXCAVATION AREAS WITHIN
FIGURE 3, THE BLOCK BETWEEN
PITT STREET AND PULASKI ST SEE P. 85.
[signature] 10/31/13

OUI, NEWMARKET RIGHT OF WAY
FIG 2/NM2 SAMPLE ~~MAP~~ LOG

B2

DATE/TIME	SAMPLE CODE (CDE-OUI-)	MITIKEM REPORT#	RESULT
10/30 1330	NM2-A12-152		
10/30 1340	NM2-A18-153		
10/30 1400	NM2-B12-154		
10/30 1415	NM2-B18-155		
10/31 1045	NM2-C12-156		
10/31 1100	NM2-C18-157		
10/31 1115	NM2-D12-158		
10/31 1130	NM2-D18-159		

NM3

DATE/TIME	SAMPLE CODE CDE-OUI	MITIKEM# REPORT	RESULT
10/31 1345	NM3-A12-160		
10/31 1400	NM3-A18-161		
10/31 1415	NM3-B12-162		
10/31 1430	NM3-B18-163		

NM4 - FIGURE 4

DATE/TIME	SAMPLE CODE (CDE-OUI-)	MITIKEM REPORT #	RESULT

(86)

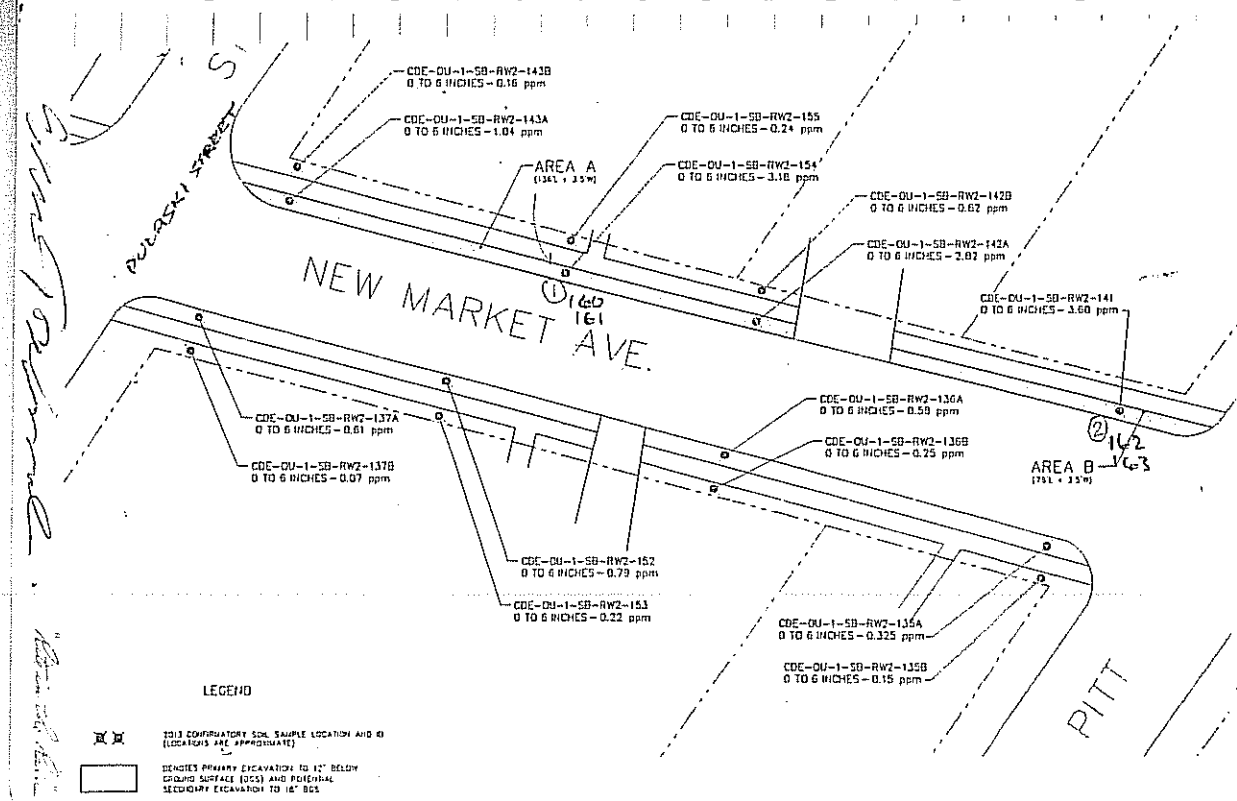
OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING.

10/31/13

1315 MOVE TO AREAS A AND B OF NM3/
FIGURE 3. EXCAVATION BETWEEN PITT
AND PULASKI STREETS.
SETUP AND BEGIN ADVANCING AUGER
TO 12" BLS. WEATHER UPDATE: LIGHT
RAIN 60°F.
1345 SAMPLE ~~OU1~~ CDE-OU1-NM3-A12-160
AT 12" BLS. CONTINUE TO 18" BLS FOR:
1400 SAMPLE CDE-OU1-NM3-A18-161.
MOVE AND SETUP TO SAMPLE AT AREA B.
BEGIN TO ADVANCE AUGER TO 12" BLS.
1415 COLLECT CDE-OU1-NM3-B12-162 AT 12".
CONTINUE TO ADVANCE AUGER TO 18" FOR
1430 SAMPLE CDE-OU1-NM3-B18-163.
PACK UP, MOVE TO TRAILER TO PROCESS
SAMPLES. SEE P. 75 FOR LAB INFO, P. 82
FOR SAMPLE LOG, P. 85 FOR FIGURE 3,
NM3 SAMPLE LOCATION MAP.
1500 PACKING SAMPLES FOR FEDEX SHIPMENT.
1530 OFF SITE TO FEDEX DROPOFF.

10/31/13

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
FIG. 3/NM3 SAMPLE LOCATION MAP



85

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/19/2013

TRANSMITTAL NO.: 01450A-485

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
66	Final Sample NM1#147 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #147 passed criteria for PCB's at 0.790 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
25-Nov-13 16:59

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2156
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]				
M2156-02	CDE-OU1-NM1-H18-147	Soil	29-Oct-13 14:30	05-Nov-13 08:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2156

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/22/13
Fax Due: 11/07/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2156-01A	CDE-OU1-NM1-F24-164	11/04/2013 14:00	11/05/2013	Soil	PMoist	/					D3
M2156-01A	CDE-OU1-NM1-F24-164	11/04/2013 14:00	11/05/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2156-02A	CDE-OU1-NM1-H18-147	10/29/2013 14:30	11/05/2013	Soil	PMoist	/					D3
M2156-02A	CDE-OU1-NM1-H18-147	10/29/2013 14:30	11/05/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/06/2013 10:29

Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2156

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-F24-164 (M2156-01A) : Dilution Factor: 5
CDE-OU1-NM1-H18-147 (M2156-02A) : Dilution Factor: 5

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AR12543NO Aroclor-1254 on front column due to M6

AR12543NR Aroclor-1254 on front column due to M6

AR12543NS Aroclor-1254 on front column due to M6

CDE-OU1-NM1-H18-147 (M2156-02A) Aroclor-1254 on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/22/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F24-164

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2156-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5918F.D/E4H5918R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 11/05/2013

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	1100	
11096-82-5	Aroclor-1260	180	U
37324-23-5	Aroclor-1262	180	U
11100-14-4	Aroclor-1268	180	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-H18-147

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2156-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5919F.D/E4H5919R.D

% Moisture: 9.1 Decanted: (Y/N) N Date Received: 11/05/2013

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	790	
11096-82-5	Aroclor-1260	180	U
37324-23-5	Aroclor-1262	180	U
11100-14-4	Aroclor-1268	180	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74616

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74616

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5899F.D/E4H5899R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74616(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74616

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5900F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	99	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	95	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74616(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74616

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5900R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	100	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74616	73	73	67	73			0
02	LCS-74616	72	73	68	73			0
03	CDE-OU1-NM1-F24-164	76	75	79	86			0
04	CDE-OU1-NM1-H18-147	70	71	70	79			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74616

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Lab Sample ID: LCS-74616 LCS Lot No.:

Date Extracted: 11/05/2013 Date Analyzed (1): 11/05/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	99.2182	74		40-140
Aroclor-1260	133.3330	94.5873	71		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/05/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	103.3168	77		40-140
Aroclor-1260	133.3330	111.1653	83		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74616

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Lab File ID: E4H5899F.D / E4H5899R.D Lab Sample ID: MB-74616

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/05/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/05/2013 Date Analyzed (2): 11/05/2013

Time Analyzed (1): 18:35 Time Analyzed (2): 18:35

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74616	LCS-74616	11/05/2013	11/05/2013
02	CDE-OU1-NM1-F24-164	M2156-01A	11/06/2013	11/06/2013
03	CDE-OU1-NM1-H18-147	M2156-02A	11/06/2013	11/06/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NP	E4H5895F.D	11/5/2013	17:23	3.259	9.712
30	AR12543NP	E4H5896F.D	11/5/2013	17:41	3.258	9.711
31	MB-74616	E4H5899F.D	11/5/2013	18:35	3.260	9.711
32	LCS-74616	E4H5900F.D	11/5/2013	18:53	3.259	9.712
33	AR16603NQ	E4H5904F.D	11/5/2013	20:06	3.259	9.711
34	AR12543NQ	E4H5905F.D	11/5/2013	20:24	3.259	9.711
35	AR16603NR	E4H5914F.D	11/6/2013	13:51	3.261	9.720
36	AR12543NR	E4H5915F.D	11/6/2013	14:10	3.257	9.713
37	CDE-OU1-NM1-F24-164	E4H5918F.D	11/6/2013	15:10	3.256	9.710
38	CDE-OU1-NM1-H18-147	E4H5919F.D	11/6/2013	15:28	3.256	9.710
39	AR16603NS	E4H5932F.D	11/6/2013	19:23	3.257	9.709
40	AR12543NS	E4H5933F.D	11/6/2013	19:41	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NP	E4H5895R.D	11/5/2013	17:23	3.976	12.132
30	AR12543NP	E4H5896R.D	11/5/2013	17:41	3.975	12.134
31	MB-74616	E4H5899R.D	11/5/2013	18:35	3.976	12.133
32	LCS-74616	E4H5900R.D	11/5/2013	18:53	3.976	12.133
33	AR16603NQ	E4H5904R.D	11/5/2013	20:06	3.976	12.134
34	AR12543NQ	E4H5905R.D	11/5/2013	20:24	3.975	12.132
35	AR16603NR	E4H5914R.D	11/6/2013	13:51	3.969	12.133
36	AR12543NR	E4H5915R.D	11/6/2013	14:10	3.970	12.131
37	CDE-OU1-NM1-F24-164	E4H5918R.D	11/6/2013	15:10	3.972	12.130
38	CDE-OU1-NM1-H18-147	E4H5919R.D	11/6/2013	15:28	3.972	12.131
39	AR16603NS	E4H5932R.D	11/6/2013	19:23	3.974	12.129
40	AR12543NS	E4H5933R.D	11/6/2013	19:41	3.973	12.128

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-4-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

Applicable QC Checklist

QC Inspector Name and Signature

Davis Raver JR

DRJr

Date

11-4-13

DAILY CHEMICAL QUALITY CONTROL REPORT

(Page 1 of 2)

Date: 11-4-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Sunny 37°

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: Sample Areas ~~NMI~~ NMI F.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped to Mitkem LAB via Fedex overnight

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: ~~Third Sample Collected NMI-F 24"~~

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken):

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

[signature] 11-4-13

Signature Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: _____

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	✓			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

_____

_____

_____

QC Inspector Name and Signature

Davis Rauser Jr

DR

Date

11-4-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-4-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:_____

Sevenson Project Manager_____

	Name	Signature	Date
QC Reviewer	Davis Lauer Jr		11-4-13
CQC Systems Manager	William Zaabar		11-9-13

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

OU1 NEW MARKET RIGHT OF WAY 11/04/13
PCB SOIL SAMPLING

(88) 11/04/13 WEATHER: SUNNY, COLD 37-40°F.

1330 E ESCHUDI AND D. RAVER ARRIVE AT AREA F, WITHIN NM1 – FIGURE 1 EXCAVATION AREA TO COLLECT SAMPLE AT A DEPTH OF 24" BLS. THIS SAMPLE IS BEING COLLECTED BECAUSE THE SAMPLE THAT WAS COLLECTED AT 18" FROM THIS LOCATION FAILED – RESULTED IN ANALYSIS OF GREATER THAN 1.0 PPM TOTAL PCBs. SEE P.72 FOR F18 RESULTS, SEE P.82 FOR SAMPLE LOG ~~CONTINUATION~~ CONTINUATION LISTING SAMPLE NM1-F24-164.

D. RAVER BEGINS ADVANCING HAND AUGER TO SAMPLE DEPTH OF 24" BLS ADJACENT TO THE HOLE USED TO COLLECT SAMPLES NM1-F12-141 AND NM1-F18-142 AT 12" AND 18" BLS. OFFSET APPROX 6"-8" WEST FROM ORIGINAL BORING HOLE.

1400 COLLECT CDE-OU1-NM1-F24-164 AT 24" BLS. MATERIAL IS DARK BROWN – REDDISH SANDY LOAM. SMALL ROCKS. MED SIZED ROCKS OF WHAT APPEAR TO BE CHUNKS OF SLATE 1/2"-1" IN SIZE. SOME CLAYEY SILT OBSERVED AT 2" THROUGHOUT SAMPLE DEPTH OF 24" BLS.

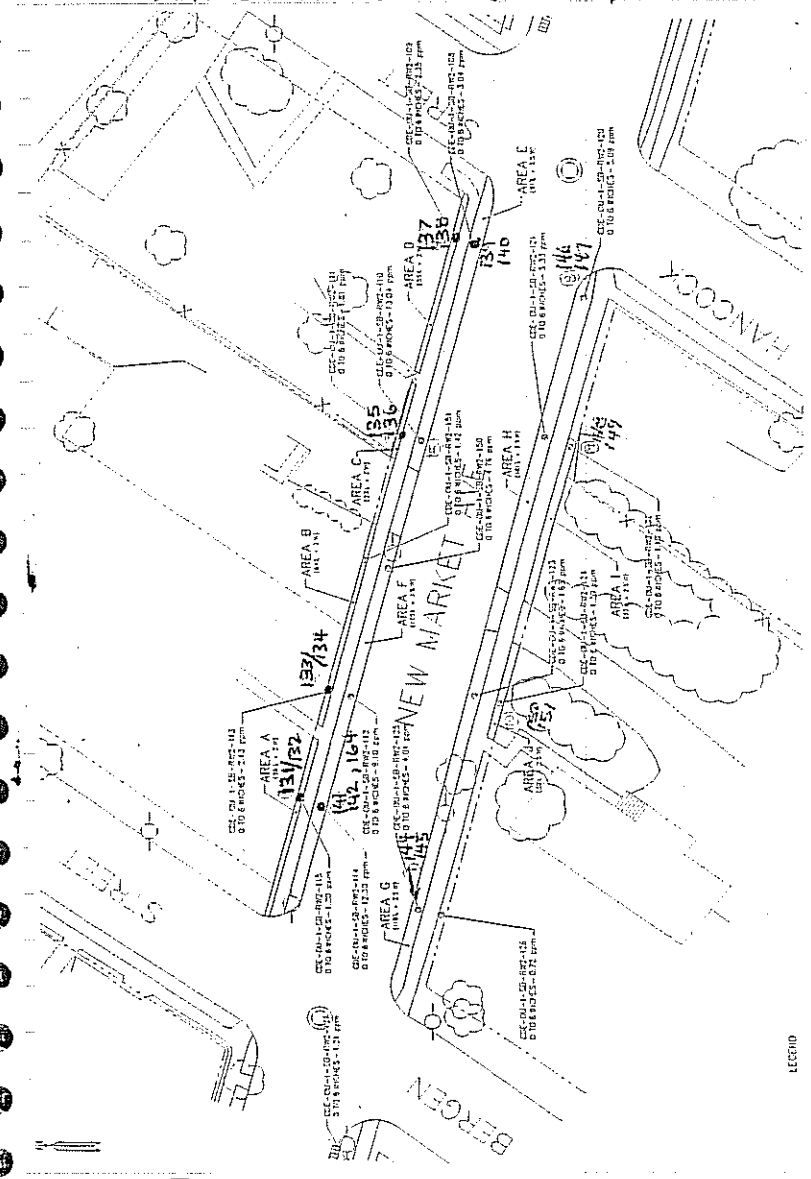
1415 RETURN TO COMPOUND TO PACK AND SHIP SAMPLES 147 AND 164.

SEE P.75 FOR LAB INFO.

11/04/13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

73



10/21/13

OUI, NEWMARKET RIGHT OF WAY

FIG 2/NM2 SAMPLE ~~MAP~~ LOG

(B2)

DATE/TIME		(CDE-OUI-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/30	1330	NM2-A12-152		
10/30	1340	NM2-A18-153		
10/30	1400	NM2-B12-154		
10/30	1415	NM2-B18-155		
10/31	1045	NM2-C12-156		
10/31	1100	NM2-C18-157		
10/31	1115	NM2-D12-158		
10/31	1130	NM2-D18-159		

NM3 - FIGURE 5

DATE/TIME		SAMPLE CODE CDE-OUI	MITKEM # REPORT	RESULT
10/31	1345	NM3-A12-160		
10/31	1400	NM3-A18-161		
10/31	1415	NM3-B12-162		
10/31	1430	NM3-B18-163		

~~NM4 - FIGURE 4~~ (B4)

~~DATE/TIME~~		~~SAMPLE CODE (CDE-OUI-)~~	~~MITKEM REPORT #~~	~~RESULT~~

RESAMPLE NM1 AREA F DUE TO 18" SAMPLE RESULT BEING ABOVE 1PPM. (SEE SAMPLE LOG ON P. 72).

NM1 - FIGURE 1

DATE/TIME		SAMPLE CODE (CDE-OUI-)	MITKEM REPORT #	RESULT
11/04	1400	NM1-F24-164		

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE/TIME		(ODE OU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/24 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140	M2109	0.100
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142	M2109	1.400
10/24	1500	NMROW-143 (WC)	M2081	
10/29	1340	NM1-G12-144	M2109	0.240
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146	M2109	1.400
10/29	1430	NM1-H18-147		
10/30	1030	NM1-I12-148		
10/30	1045	NM1-I18-149		
10/30	1100	NM1-J12-150		
10/30	1115	NM1-J18-151		

SAMPLE LOG CONTINUED ON P. 82
SAMPLE MAP CONTINUED ON P. 83.

[signature] 10/30/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/06/13
TAT- Indicate Date Needed: 2 DAYS
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN: -

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other
State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS +1262, 1268	TEMP							
	NMI-F24-164	11/04/13	1400	G	SO		1			X								
	NMI-H18-147	10/29/13	1430	G	SO		1			X								
	TEMPERATURE BLANK										X							

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FED EX	11/04/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
ETSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 04NOV13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 05 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7970 7266 3182
0201

ED NCOA

02852
RI-US
PVD

51AG1/D5E6/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797072663182
Ship date: 11/04/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/19/2013

TRANSMITTAL NO.: 01450A-486

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
67	Info Sample NM1#164 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #148 failed criteria for PCB's at 1.10 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
25-Nov-13 16:59

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2156
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2156-01	CDE-OU1-NM1-F24-164	Soil	04-Nov-13 14:00	05-Nov-13 08:50
[redacted]				

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2156

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/22/13
Fax Due: 11/07/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2156-01A	CDE-OU1-NM1-F24-164	11/04/2013 14:00	11/05/2013	Soil	PMoist	/					D3
M2156-01A	CDE-OU1-NM1-F24-164	11/04/2013 14:00	11/05/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2156-02A	CDE-OU1-NM1-H18-147	10/29/2013 14:30	11/05/2013	Soil	PMoist	/					D3
M2156-02A	CDE-OU1-NM1-H18-147	10/29/2013 14:30	11/05/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/06/2013 10:29

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2156

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-F24-164 (M2156-01A) : Dilution Factor: 5
CDE-OU1-NM1-H18-147 (M2156-02A) : Dilution Factor: 5

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

The following samples were manually integrated:

AR12543NO Aroclor-1254 on front column due to M6

AR12543NR Aroclor-1254 on front column due to M6

AR12543NS Aroclor-1254 on front column due to M6

CDE-OU1-NM1-H18-147 (M2156-02A) Aroclor-1254 on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/22/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F24-164

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2156-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5918F.D/E4H5918R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 11/05/2013

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	1100	
11096-82-5	Aroclor-1260	180	U
37324-23-5	Aroclor-1262	180	U
11100-14-4	Aroclor-1268	180	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-H18-147

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2156-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5919F.D/E4H5919R.D

% Moisture: 9.1 Decanted: (Y/N) N Date Received: 11/05/2013

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	790	
11096-82-5	Aroclor-1260	180	U
37324-23-5	Aroclor-1262	180	U
11100-14-4	Aroclor-1268	180	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74616

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74616

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5899F.D/E4H5899R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74616(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74616

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5900F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	99	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	95	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74616(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74616

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5900R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	100	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74616	73	73	67	73			0
02	LCS-74616	72	73	68	73			0
03	CDE-OU1-NM1-F24-164	76	75	79	86			0
04	CDE-OU1-NM1-H18-147	70	71	70	79			0

QC LIMITS

(34-147)

(60-125)

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74616

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Lab Sample ID: LCS-74616 LCS Lot No.:

Date Extracted: 11/05/2013 Date Analyzed (1): 11/05/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	99.2182	74		40-140
Aroclor-1260	133.3330	94.5873	71		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/05/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	103.3168	77		40-140
Aroclor-1260	133.3330	111.1653	83		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74616

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

Lab File ID: E4H5899F.D / E4H5899R.D Lab Sample ID: MB-74616

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/05/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/05/2013 Date Analyzed (2): 11/05/2013

Time Analyzed (1): 18:35 Time Analyzed (2): 18:35

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74616	LCS-74616	11/05/2013	11/05/2013
02	CDE-OU1-NM1-F24-164	M2156-01A	11/06/2013	11/06/2013
03	CDE-OU1-NM1-H18-147	M2156-02A	11/06/2013	11/06/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NP	E4H5895F.D	11/5/2013	17:23	3.259	9.712
30	AR12543NP	E4H5896F.D	11/5/2013	17:41	3.258	9.711
31	MB-74616	E4H5899F.D	11/5/2013	18:35	3.260	9.711
32	LCS-74616	E4H5900F.D	11/5/2013	18:53	3.259	9.712
33	AR16603NQ	E4H5904F.D	11/5/2013	20:06	3.259	9.711
34	AR12543NQ	E4H5905F.D	11/5/2013	20:24	3.259	9.711
35	AR16603NR	E4H5914F.D	11/6/2013	13:51	3.261	9.720
36	AR12543NR	E4H5915F.D	11/6/2013	14:10	3.257	9.713
37	CDE-OU1-NM1-F24-164	E4H5918F.D	11/6/2013	15:10	3.256	9.710
38	CDE-OU1-NM1-H18-147	E4H5919F.D	11/6/2013	15:28	3.256	9.710
39	AR16603NS	E4H5932F.D	11/6/2013	19:23	3.257	9.709
40	AR12543NS	E4H5933F.D	11/6/2013	19:41	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2156 Mod. Ref No.: SDG No.: SM2156

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NP	E4H5895R.D	11/5/2013	17:23	3.976	12.132
30	AR12543NP	E4H5896R.D	11/5/2013	17:41	3.975	12.134
31	MB-74616	E4H5899R.D	11/5/2013	18:35	3.976	12.133
32	LCS-74616	E4H5900R.D	11/5/2013	18:53	3.976	12.133
33	AR16603NQ	E4H5904R.D	11/5/2013	20:06	3.976	12.134
34	AR12543NQ	E4H5905R.D	11/5/2013	20:24	3.975	12.132
35	AR16603NR	E4H5914R.D	11/6/2013	13:51	3.969	12.133
36	AR12543NR	E4H5915R.D	11/6/2013	14:10	3.970	12.131
37	CDE-OU1-NM1-F24-164	E4H5918R.D	11/6/2013	15:10	3.972	12.130
38	CDE-OU1-NM1-H18-147	E4H5919R.D	11/6/2013	15:28	3.972	12.131
39	AR16603NS	E4H5932R.D	11/6/2013	19:23	3.974	12.129
40	AR12543NS	E4H5933R.D	11/6/2013	19:41	3.973	12.128

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-4-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

Applicable QC Checklist

QC Inspector Name and Signature

Davis Raver JR

DRJr

Date

11-4-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11-4-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Sunny 37°

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: Sample Areas NMI ~~Alma~~ F.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments:
Samples Shipped to MitKem LAB via Fedex overnight

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: ~~Third Sample Collected NMI NMI - F 24~~

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken):

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-4-13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: _____

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

_____

QC Inspector Name and Signature

Davis Rauer Jr

Date

11-4-13

E:\SES Mikes Backup\Sampling\DCOCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-4-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Rauer Jr		11-9-13
CQC Systems Manager	William Zachow		11-9-13

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

OU1 NEW MARKET RIGHT OF WAY 11/04/13
PCB SOIL SAMPLING

(88) 11/04/13 WEATHER: SUNNY, COLD 37-40°F.

1330 ETSCHUDI AND D. RAVER ARRIVE T AREA F, WITHIN NM1-FIGURE 1 EXCAVATION AREA TO COLLECT SAMPLE AT A DEPTH OF 24" BLS. THIS SAMPLE IS BEING COLLECTED BECAUSE THE SAMPLE THAT WAS COLLECTED AT 18" FROM THIS LOCATION FAILED = RESULTED IN ANALYSIS OF GREATER THAN 1.0 PPM TOTAL PCBs. SEE P.72 FOR F18 RESULTS, SEE P.82 FOR SAMPLE LOG ~~CONTINUATION~~ CONTINUATION LISTING SAMPLE NM1-F24-164.

D. RAVER BEGINS ADVANCING HAND AUGER TO SAMPLE DEPTH OF 24" BLS ADJACENT TO THE HOLE USED TO COLLECT SAMPLES NM1-F12-141 AND NM1-F18-142 AT 12" AND 18" BLS. OFF SET APPROX 6-8" WEST FROM ORIGINAL BORING HOLE.

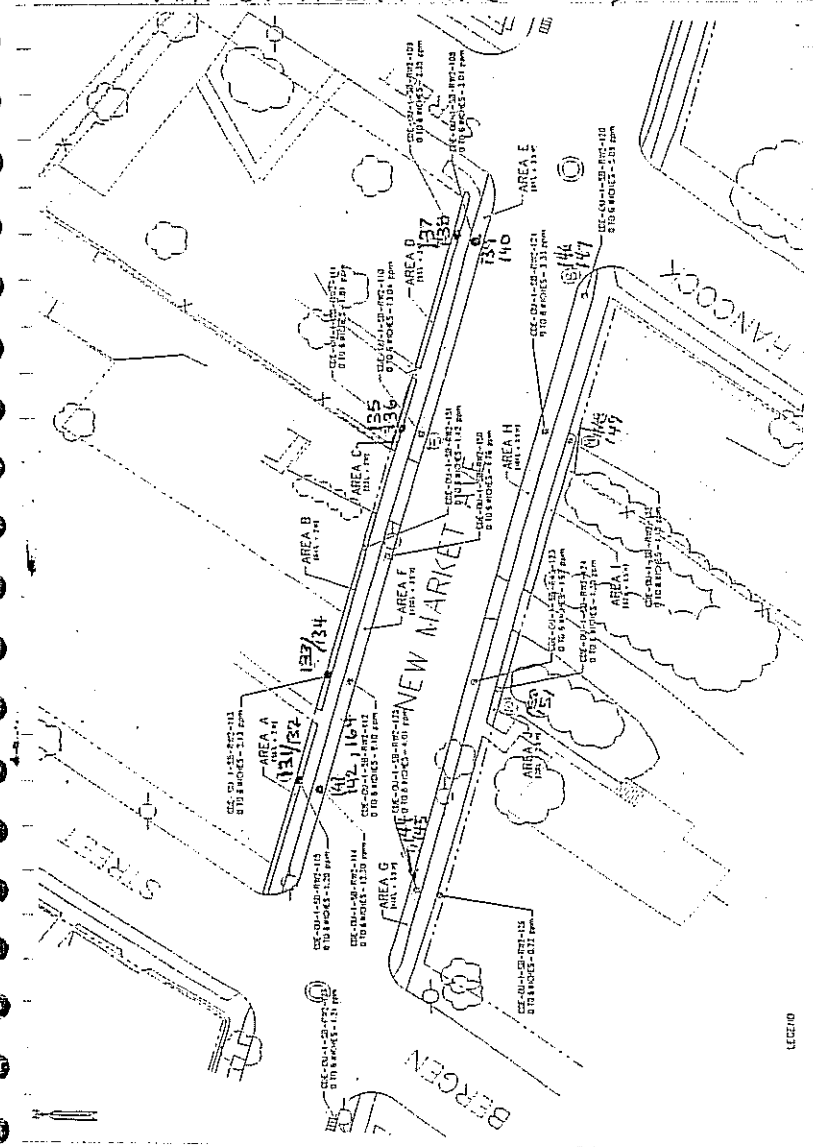
1400 COLLECT CDE-OU1-NM1-F24-164 AT 24" BLS. MATERIAL IS DARK BROWN - REDDISH SANDY LOAM. SMALL ROCKS - MED SIZED ROCKS OF WHAT APEAR TO BE CHUNKS OF SLATE 1/2"-1" IN SIZE. SOME CLAYEY SILT OBSERVED AT 2" THROUGHOUT SAMPLE DEPTH OF 24" BLS.

1415 RETURN TO COMPOUND TO PACK AND SHIP SAMPLES 147 AND 164.
SEE P.75 FOR LAB INFO.

[signature] 11/04/13

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NMI (FIGURE 1)

73



10/21/13

OU1, NEWMARKET RIGHT OF WAY

(B2)

FIG 2/NM2 SAMPLE ~~MAP~~ LOG

DATE/TIME	(CDE-OU1-) SAMPLE CODE	MITIGEM REPORT#	RESULT
10/30 1330	NM2-A12-152		
10/30 1340	NM2-A18-153		
10/30 1400	NM2-B12-154		
10/30 1415	NM2-B18-155		
10/31 1045	NM2-C12-156		
10/31 1100	NM2-C18-157		
10/31 1115	NM2-D12-158		
10/31 1130	NM2-D18-159		

~~NM3 - FIGURE 3~~

DATE/TIME	SAMPLE CODE CDE-OU1	MITIGEM# REPORT	RESULT
10/31 1345	NM3-A12-160		
10/31 1400	NM3-A18-161		
10/31 1415	NM3-B12-162		
10/31 1430	NM3-B18-163		

~~NM4 - FIGURE 4~~

~~DATE/TIME~~	~~SAMPLE CODE (CDE-OU1-)~~	~~MITIGEM REPORT#~~	~~RESULT~~

RESAMPLE NM1 AREA F DUE TO 18" SAMPLE RESULT BEING ABOVE 1PPM. (SEE SAMPLE LOG ON P. 72).

NM1 - FIGURE 1

DATE/TIME	SAMPLE CODE (CDE-OU1-)	MITIGEM REPORT#	RESULT
11/04 1400	NM1-F24-164		

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE	TIME	(CDEOU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/24 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140	M2109	0.100
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142	M2109	1.400
10/24	1500	NMROW-143	(WC) M2081	
10/29	1340	NM1-G12-144	M2109	0.240
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146	M2109	1.400
10/29	1430	NM1-H18-147		
10/30	1030	NM1-I12-148		
10/30	1045	NM1-I18-149		
10/30	1100	NM1-J12-150		
10/30	1115	NM1-J18-151		

SAMPLE LOG CONTINUED ON P. 82

SAMPLE MAP CONTINUED ON P. 83.

10/30/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 11/06/13
TAT- Indicate Date Needed: 2 DAYS
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
533 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN: -

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

W=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS + 1262, 1268	TEMP
	CDE-001-										
	NMI-F24-164	11/04/13	1400	G	SO		1			X	
	NMI-H18-147	10/29/13	1430	G	SO		1			X	
	TEMPERATURE BLANK										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FED EX	11/04/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SELENSON.COM
ETSCHUDI@SELENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 04NOV13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

TUE - 05 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7970 7266 3182
0201

ED NCOA

02852
RI-US
PVD

51AG1/D5EB/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797072663182
Ship date: 11/04/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/19/2013

TRANSMITTAL NO.: 01450A-487

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
68	Final- NM2#153 & NM4#165,167,169,171 ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #153 passed criteria for PCB's at 0.640 ppm,
Sample #165 passed criteria for PCB's at 0.084 ppm,
Sample #167 passed criteria for PCB's at 0.170 ppm,
Sample #169 passed criteria for PCB's at 0.670 ppm,
Sample #171 passed criteria for PCB's at 0.270 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
25-Nov-13 13:18

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2163
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2163-01	CDE-OU1-NM2-A18-153	Soil	30-Oct-13 13:40	06-Nov-13 08:42
M2163-02	CDE-OU1-NM4-A12-165	Soil	05-Nov-13 10:30	06-Nov-13 08:42
M2163-03	CDE-OU1-NM4-B12-167	Soil	05-Nov-13 11:00	06-Nov-13 08:42
M2163-04	CDE-OU1-NM4-C12-169	Soil	05-Nov-13 13:15	06-Nov-13 08:42
M2163-05	CDE-OU1-NM4-D12-171	Soil	05-Nov-13 13:45	06-Nov-13 08:42

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2163

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: Sample ID changed for all samples

Case:
SDG:
PO: G2789024

HC Due: 11/25/13
Fax Due: 11/08/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2163-01A	CDE-OU1-NM2-A18-153	10/30/2013 13:40	11/06/2013	Soil	PMoist	/					C3
M2163-01A	CDE-OU1-NM2-A18-153	10/30/2013 13:40	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C3
M2163-02A	CDE-OU1-NM4-A12-165	11/05/2013 10:30	11/06/2013	Soil	PMoist	/					C3
M2163-02A	CDE-OU1-NM4-A12-165	11/05/2013 10:30	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C3
M2163-03A	CDE-OU1-NM4-B12-167	11/05/2013 11:00	11/06/2013	Soil	PMoist	/					C3
M2163-03A	CDE-OU1-NM4-B12-167	11/05/2013 11:00	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C3
M2163-04A	CDE-OU1-NM4-C12-169	11/05/2013 13:15	11/06/2013	Soil	PMoist	/					C3
M2163-04A	CDE-OU1-NM4-C12-169	11/05/2013 13:15	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C3
M2163-05A	CDE-OU1-NM4-D12-171	11/05/2013 13:45	11/06/2013	Soil	PMoist	/					C3
M2163-05A	CDE-OU1-NM4-D12-171	11/05/2013 13:45	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/07/2013 08:56

Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2163

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM4-A12-165 (M2163-02A), recovery is below criteria for Decachlorobiphenyl on rear column at 58% with criteria of (60-125) and Decachlorobiphenyl on front column at 48% with criteria of (60-125).

CDE-OU1-NM4-B12-167 (M2163-03A), recovery is below criteria for Decachlorobiphenyl on front column at 53% with criteria of (60-125).

CDE-OU1-NM4-C12-169 (M2163-04A), recovery is below criteria for Decachlorobiphenyl on rear column at 50% with criteria of (60-125) and Decachlorobiphenyl on front column at 51% with criteria of (60-125).

CDE-OU1-NM4-D12-171 (M2163-05A), recovery is below criteria for Decachlorobiphenyl on rear column at 56% with criteria of (60-125) and Decachlorobiphenyl on front column at 53% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. **Matrix Spike / Matrix Spike Duplicate (MS/MSD):**

No client-requested MS/MSD analyses were included in this SDG.

E. **Dilutions:**

The following samples were analyzed at dilution:

CDE-OU1-NM2-A18-153 (M2163-01A) : Dilution Factor: 4

F. **Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. **Manual Integration**

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

The following samples were manually integrated:

AR12543NR Aroclor-1254 on front column due to M6

AR12543NS Aroclor-1254 on front column due to M6

AR12543NT Aroclor-1254 on front column , Decachlorobiphenyl on front column due to M6

CDE-OU1-NM2-A18-153 (M2163-01A) Aroclor-1254 on front column due to M6

CDE-OU1-NM4-A12-165 (M2163-02A) Aroclor-1254 on front column due to M6

CDE-OU1-NM4-B12-167 (M2163-03A) Aroclor-1254 on front column due to M6

CDE-OU1-NM4-D12-171 (M2163-05A) Aroclor-1254 on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/25/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM2-A18-153

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2163-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H5948F.D/E4H5948R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/07/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	150	U
11104-28-2	Aroclor-1221	150	U
11141-16-5	Aroclor-1232	150	U
53469-21-9	Aroclor-1242	150	U
12672-29-6	Aroclor-1248	150	U
11097-69-1	Aroclor-1254	640	
11096-82-5	Aroclor-1260	150	U
37324-23-5	Aroclor-1262	150	U
11100-14-4	Aroclor-1268	150	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM4-A12-165

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2163-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5927F.D/E4H5927R.D

% Moisture: 5.3 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	84	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM4-B12-167

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2163-03A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5928F.D/E4H5928R.D

% Moisture: 8.3 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	170	P
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM4-C12-169

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2163-04A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E4H5929F.D/E4H5929R.D

% Moisture: 6.7 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	67	P
11096-82-5	Aroclor-1260	35	U
37324-23-5	Aroclor-1262	35	U
11100-14-4	Aroclor-1268	35	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM4-D12-171

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2163-05A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H5930F.D/E4H5930R.D

% Moisture: 5.0 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	270	
11096-82-5	Aroclor-1260	34	U
37324-23-5	Aroclor-1262	34	U
11100-14-4	Aroclor-1268	34	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74637

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5920F.D/E4H5920R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74637(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5921F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	90	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	92	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74637(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5921R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	92	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74637(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5922F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	100	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	94	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74637(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5922R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74637	68	69	60	73			0
02	LCS-74637	63	64	66	79			0
03	LCSD-74637	67	67	64	77			0
04	CDE-OU1-NM4-A12-165	62	60	48 *	58 *			2
05	CDE-OU1-NM4-B12-167	67	64	53 *	62			1
06	CDE-OU1-NM4-C12-169	59	53	51 *	50 *			2
07	CDE-OU1-NM4-D12-171	65	56	53 *	56 *			2
08	CDE-OU1-NM2-A18-153	76	84	65	87			0

QC LIMITS

(34-147)

(60-125)

TCX = Tetrachloro-m-xylene

DCB = Decachlorobiphenyl

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Lab Sample ID: LCS-74637 LCS Lot No.:

Date Extracted: 11/06/2013 Date Analyzed (1): 11/06/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	89.7416	67		40-140
Aroclor-1260	133.3330	91.5897	69		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/06/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	92.3158	69		40-140
Aroclor-1260	133.3330	109.5354	82		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Lab Sample ID: LCSD-74637 LCS Lot No.:

Date Extracted: 11/06/2013 Date Analyzed (1): 11/06/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
Aroclor-1016	133.3330	102.6806	77	40-140	14	30
Aroclor-1260	133.3330	94.2254	71	60-130	3.0	30

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/06/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
Aroclor-1016	133.3330	106.0907	80	40-140	15	30
Aroclor-1260	133.3330	114.2367	86	60-130	5.0	30

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

RPD: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

Lab File ID: E4H5920F.D / E4H5920R.D Lab Sample ID: MB-74637

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/06/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/06/2013 Date Analyzed (2): 11/06/2013

Time Analyzed (1): 15:46 Time Analyzed (2): 15:46

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74637	LCS-74637	11/06/2013	11/06/2013
02	LCSD-74637	LCSD-74637	11/06/2013	11/06/2013
03	CDE-OU1-NM4-A12-165	M2163-02A	11/06/2013	11/06/2013
04	CDE-OU1-NM4-B12-167	M2163-03A	11/06/2013	11/06/2013
05	CDE-OU1-NM4-C12-169	M2163-04A	11/06/2013	11/06/2013
06	CDE-OU1-NM4-D12-171	M2163-05A	11/06/2013	11/06/2013
07	CDE-OU1-NM2-A18-153	M2163-01A	11/07/2013	11/07/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NR	E4H5914F.D	11/6/2013	13:51	3.261	9.720
30	AR12543NR	E4H5915F.D	11/6/2013	14:10	3.257	9.713
31	MB-74637	E4H5920F.D	11/6/2013	15:46	3.256	9.710
32	LCS-74637	E4H5921F.D	11/6/2013	16:04	3.256	9.710
33	LCSD-74637	E4H5922F.D	11/6/2013	16:22	3.256	9.711
34	CDE-OU1-NM4-A12-165	E4H5927F.D	11/6/2013	17:53	3.256	9.710
35	CDE-OU1-NM4-B12-167	E4H5928F.D	11/6/2013	18:11	3.257	9.711
36	CDE-OU1-NM4-C12-169	E4H5929F.D	11/6/2013	18:29	3.256	9.707
37	CDE-OU1-NM4-D12-171	E4H5930F.D	11/6/2013	18:47	3.257	9.711
38	AR16603NS	E4H5932F.D	11/6/2013	19:23	3.257	9.709
39	AR12543NS	E4H5933F.D	11/6/2013	19:41	3.256	9.710
40	AR16603NT	E4H5944F.D	11/7/2013	11:47	3.257	9.708
41	AR12543NT	E4H5945F.D	11/7/2013	12:21	3.263	9.719
42	CDE-OU1-NM2-A18-153	E4H5948F.D	11/7/2013	13:32	3.257	9.709
43	AR16603NU	E4H5957F.D	11/7/2013	16:15	3.257	9.710
44	AR12543NU	E4H5958F.D	11/7/2013	16:33	3.259	9.709

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2163 Mod. Ref No.: SDG No.: SM2163

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NR	E4H5914R.D	11/6/2013	13:51	3.969	12.133
30	AR12543NR	E4H5915R.D	11/6/2013	14:10	3.970	12.131
31	MB-74637	E4H5920R.D	11/6/2013	15:46	3.973	12.130
32	LCS-74637	E4H5921R.D	11/6/2013	16:04	3.973	12.130
33	LCSD-74637	E4H5922R.D	11/6/2013	16:22	3.974	12.130
34	CDE-OU1-NM4-A12-165	E4H5927R.D	11/6/2013	17:53	3.973	12.128
35	CDE-OU1-NM4-B12-167	E4H5928R.D	11/6/2013	18:11	3.973	12.129
36	CDE-OU1-NM4-C12-169	E4H5929R.D	11/6/2013	18:29	3.973	12.128
37	CDE-OU1-NM4-D12-171	E4H5930R.D	11/6/2013	18:47	3.973	12.130
38	AR16603NS	E4H5932R.D	11/6/2013	19:23	3.974	12.129
39	AR12543NS	E4H5933R.D	11/6/2013	19:41	3.973	12.128
40	AR16603NT	E4H5944R.D	11/7/2013	11:47	3.973	12.125
41	AR12543NT	E4H5945R.D	11/7/2013	12:21	3.971	12.127
42	CDE-OU1-NM2-A18-153	E4H5948R.D	11/7/2013	13:32	3.973	12.129
43	AR16603NU	E4H5957R.D	11/7/2013	16:15	3.974	12.128
44	AR12543NU	E4H5958R.D	11/7/2013	16:33	3.975	12.129

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-05-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments
Applicable QS Checklist

QC Inspector Name and Signature
Davis Rauer JR
DRL

Date
11-05-13

DAILY CHEMICAL QUALITY CONTROL REPORT

(Page 1 of 2)

Date: 11-05-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Partly Cloudy, 55° F

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: Sample Areas NM4 A, B, C, D. NM1 ~~NM5~~ ~~I-12~~ I, J. Samples I, J were recollected, Primary Samples Collected were collected in wrong Location.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped to Mitkem LAB via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: Secondary Sample NM2-A18 Previously Collected 10-30-13 Sent for Analysis

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-05-13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-05-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? SCANNED/EMAIL	X			

Notes/Comments

QC Inspector Name and Signature

DAVID RAVER JR

DRR

Date

11-05-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-05-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver Jr	[signature]	11-05-13
CQC Systems Manager	William Zaombrana	[signature]	10-25-12

DUI SOIL SAMPLE
LOG BOOK 2 of

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2015 -

OU1, NEWMARKET RIGHT OF WAY
PCB SOIL SAMPLES

11/05/13

EARLY AM WEATHER: CLEAR SKIES, 39°F

1015 E. TSCHUDI, D. RAVER ARRIVE TO NM-4 FIGURE 4 EXCAVATION AREA A TO COLLECT SOIL SAMPLES AT 12 AND 18" BLS. SEE PREVIOUS ENTRY ON P. 75 FOR LAB INFO.

D. RAVER ADVANCES HAND AUGER TO 12" BLS TO COLLECT SOIL SAMPLE MATERIAL

1030 COLLECT CDE-OU1-NM4-A12-165 FROM 12" DEPTH

MEASURED ~~ESTIMATED~~ DISTANCE EAST OFF CONCRETE WALL = 14'.

SEE SOIL SAMPLE LOCATION MAP FOR #165/166 OF P. 87. CONTINUE SAMPLING FROM 18" BLS.

1045 COLLECT ~~CDE-NM~~ CDE-OU1-NM4-A18-166

MOVE TO AREA B WITHIN THE FIG 4/NM4 EXCAVATION AREA. BEGIN ADVANCING AUGER TO 12" BLS.

1100 COLLECT CDE OU1-NM4-B12-167 AT 12" BLS.

CONTINUE TO ADVANCE AUGER TO B18" DEPTH.

1115 COLLECT CDE-OU1-NM4-B18-168 AT 18" DEPTH.

1130 PACK UP FIELD SAMPLING EQUIPMENT AND MOVE TO SES COMPOUND. LATE AM WEATHER UPDATE:

PARTLY CLOUDY, CALM WIND, 55°F.

1300 RETURN TO FIELD TO RESUME SAMPLING AT AREAS C AND D OF NM-4/FIGURE 4.

COLLECTED C12 AND C18 WITHOUT INCIDENT, FULL RECOVERY. SEE P. 91 FOR CONTINUATION.

[signature] 11/5/13

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(90)

PCB SOIL SAMPLE LOG CONT'D

DATE (2012)	TIME	SAMPLE CODE (CDE-DUI...)	MITIGEM REPORT#	RESULTS
11/5	1030	NM4-A12-165		
11/5	1045	NM4-A18-166		
11/5	1100	NM4-B12-167		
11/5	1115	NM4-B18-168		
11/5	1315	NM4-C12-169		
11/5	1330	NM4-C18-170		
11/5	1345	NM4-D12-171		
~~11/5~~	~~1400~~	~~NM4-D18-172~~ NO SAMPLE-AUGER REFUSAL		
~~11/5~~		~~NM1-I12-2-172~~		
11/5	1430	NM1-I12-172		
11/5	1445	NM1-J12-173		

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLE

11/5/12 (91)

1400 - AFTER 5 OFFSETS OUR ATTEMPT TO COLLECT A SAMPLE FROM AREA D AT 18" WAS FAILURE. AUGER REFUSAL AT 12-14", STONES ROCKS DEBRIS, APPARENT ROAD BED AT 14" BLS. NO RECOVERABLE SAMPLE. SEE P. 90 FOR A LOG OF SUCCESSFUL SAMPLE LOCATIONS.

1415 MOVE TO NM1-AREA I TO COLLECT A SECOND SAMPLE AT 12". A 3' OFFSET TO THE WEST HAS BEEN REQUESTED BY DIEGO GARCIA, EPA RPM.

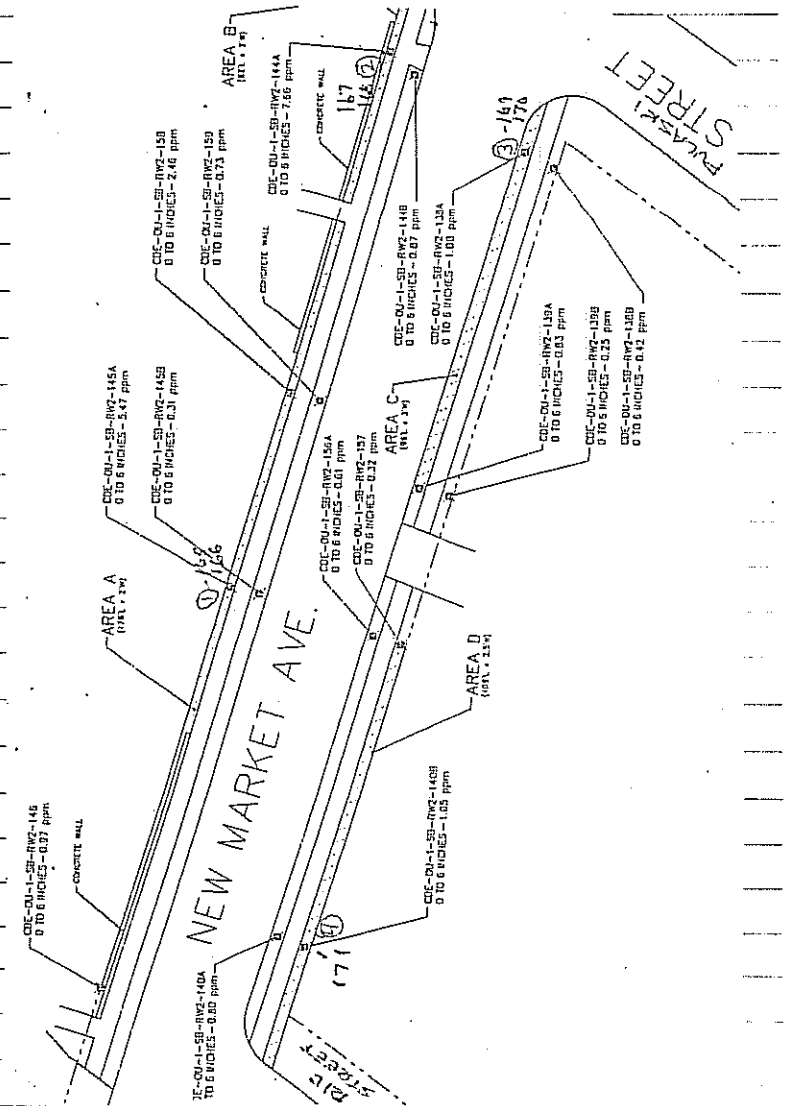
— UPDATE. AFTER A SECOND REVIEW OF SAMPLE LOCATIONS, I, E. TSCHUDI REALIZE I MADE A MISTAKE IN TWO PREVIOUS SAMPLE LOCATIONS. THE SAMPLES COLLECTED IN NM-1-AREAS I AND J, WERE MISTAKENLY COLLECTED IN AREAS H AND G RESPECTIVELY. THEREFORE THERE WASNT A SAMPLE COLLECTED FOR AREA I AND J PREVIOUSLY BY ME. THE SAMPLE #'S 148, 149, 150, 151 MUST BE VOIDED AND RESAMPLED.

1430 COLLECT CDE DUI-NM1-I12-172 IN PROPER LOCATION IN AREA I

1445 COLLECT ~~CDE DUI NM1~~ CDE DUI-NM1 J12-173 IN AREA J, SEE MAP ON P. 73.

OU1, NEW MARKET AVE, RIGHT OF WAY
PCB SOIL SAMPLING
NM 4 - FIGURE-4 SAMPLE LOCATION MAP

87



OU1, NEWMARKET RIGHT OF WAY

FIG 2/NM2 SAMPLE ~~MAP~~, LOG

B2

DATE/TIME		SAMPLE CODE (CDE-OU1-)	MITKEM REPORT #	RESULT
10/30	1330	NM2-A12-152	11/04 M2116	2.400
10/30	1340	NM2-A18-153		
10/30	1400	NM2-B12-154	M2116	0.390
10/30	1415	NM2-B18-155		
10/31	1045	NM2-C12-156	11/5 M2134	0.120 ~~0.120~~
10/31	1100	NM2-C18-157		
10/31	1115	NM2-D12-158	M2134	0.170
10/31	1130	NM2-D18-159		

~~NM3 - FIGURE 5~~

DATE/TIME		SAMPLE CODE CDE-OU1	MITKEM # REPORT	RESULT
10/31	1345	NM3-A12-160	M2134	0.180
10/31	1400	NM3-A18-161		
10/31	1415	NM3-B12-162	M2134	0.560
10/31	1430	NM3-B18-163		

~~NM4 - FIGURE 4~~

~~DATE/TIME~~		SAMPLE CODE (CDE-OU1-)	MITKEM REPORT #	~~RESULT~~

RESAMPLE NM1 AREA F DUE TO 18" SAMPLE RESULT BEING ABOVE 1PPM. (SEE SAMPLE LOG ON P. 72).

NM1 - FIGURE 1

DATE/TIME		SAMPLE CODE (CDE-OU1-)	MITKEM REPORT #	RESULT
11/04	1400	NM1-F24-164		

SEE CONTINUATION OF SAMPLE LOG ON P. 90

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE/TIME		(ODEQ-OU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/22 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140	11/01 M2109	6.100
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142	11/01 M2109	1.400
10/24	1500	NMROW-143	(WC) M2081	
10/29	1340	NM1-G12-144	11/01 M2109	0.240
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146	11/01 M2109	1.400
10/29	1430	NM1-H18-147		
10/30	1030	NM1-I12-148	11/04 M2116	2.200
10/30	1045	NM1-I18-149		
10/30	1100	NM1-J12-150	M2116	0.620
10/30	1115	NM1-J18-151		

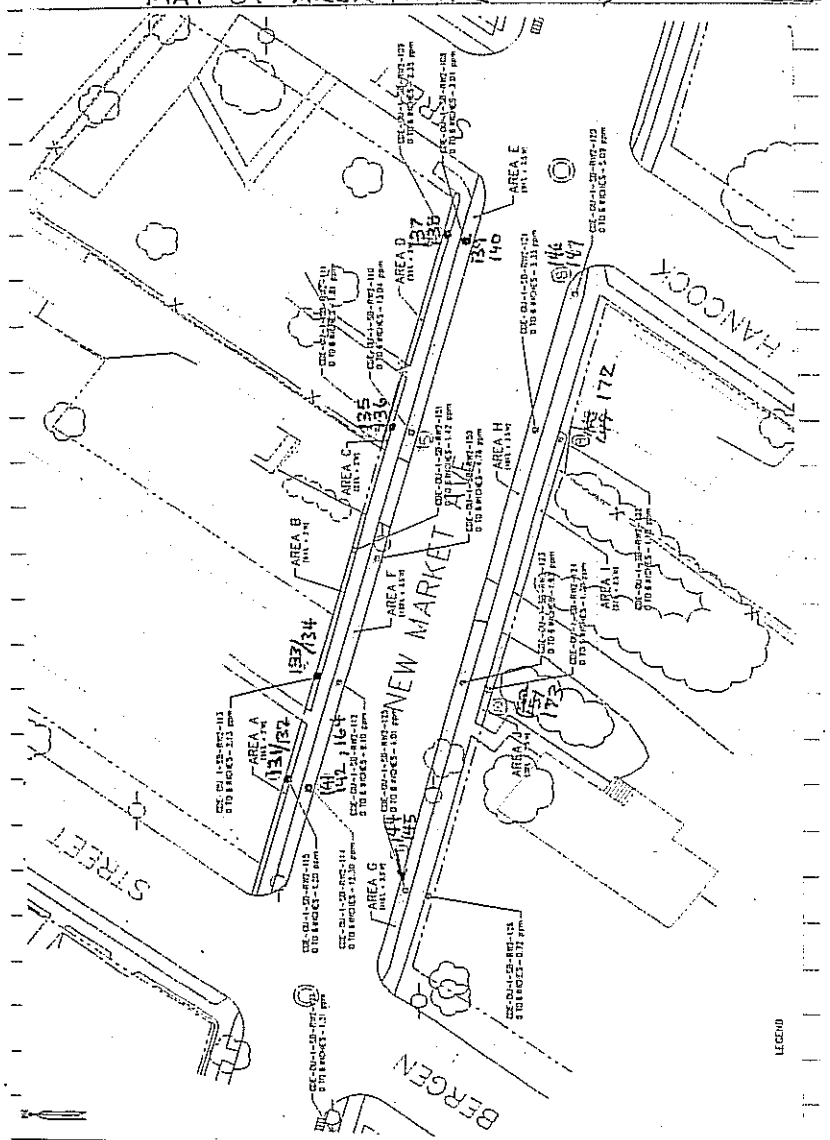
SAMPLE LOG CONTINUED ON P. 82

SAMPLE MAP CONTINUED ON P. 83.

10/30/13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



10/21/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

W=Drinking Water GW=Groundwater WW=Wastewater
Oil SW= Surface Water SO=Soil SL=Sludge A=Air
= X2= X3=

G=Grab C=Composite

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Id:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS +1262, 1268	24HR TAT *	TEMP.						
	NM2-A18 153	10/30/13	1340	G	SO		1			X								
	NM4-A12-165	11/05/13	1030	G	SO		1			X								
	NM4-B12-167	11/05/13	1100	G	SO		1			X								
	NM4-C12-169	11/05/13	1315	G	SO		1			X								
	NM4-D12-171	11/05/13	1345	G	SO		1			X								
	NM1-I12-172	11/05/13	1430	G	SO		1			X	*							
	NM1-J12-173	11/05/13	1445	G	SO		1			X	*							
	TEMP BLANK											X						

Containers: | Analyses:

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FEDEX	11/05/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
E.TSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797084819737
Ship date: 11/05/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorneys fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 05NOV13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 06 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7970 8481 9737
0201

ED NCOA

02852
RI-US
PVD

51AG1/D5E6/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/19/2013

TRANSMITTAL NO.: 01450A-488

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
69	Final Sample NM1#172, 173 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #172 passed criteria for PCB's at 0.570 ppm,
Sample #173 passed criteria for PCB's at 0.150 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
25-Nov-13 13:25

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M2162
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2162-01	CDE-OU1-NM1-I12-172	Soil	05-Nov-13 14:30	06-Nov-13 08:42
M2162-02	CDE-OU1-NM1-J12-173	Soil	05-Nov-13 14:45	06-Nov-13 08:42

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2162

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: Sample ID changed for both samples.

Case:
SDG:
PO: G2789024

HC Due: 11/25/13
Fax Due: 11/07/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2162-01A	CDE-OU1-NM1-I12-172	11/05/2013 14:30	11/06/2013	Soil	PMoist	/					C2
M2162-01A	CDE-OU1-NM1-I12-172	11/05/2013 14:30	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C2
M2162-02A	CDE-OU1-NM1-J12-173	11/05/2013 14:45	11/06/2013	Soil	PMoist	/					C2
M2162-02A	CDE-OU1-NM1-J12-173	11/05/2013 14:45	11/06/2013	Soil	SW8082_S	/ + AR1262,1268				Y	C2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/07/2013 16:15

Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2162

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-I12-172 (M2162-01A), recovery is below criteria for Decachlorobiphenyl on rear column at 59% with criteria of (60-125) and Decachlorobiphenyl on front column at 54% with criteria of (60-125).

CDE-OU1-NM1-J12-173 (M2162-02A), recovery is below criteria for Decachlorobiphenyl on rear column at 57% with criteria of (60-125) and Decachlorobiphenyl on front column at 48% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AR12543NR Aroclor-1254 on front column due to M6

AR12543NS Aroclor-1254 on front column due to M6

AR12543NT Aroclor-1254 on front column , Decachlorobiphenyl on front column due to M6

CDE-OU1-NM1-I12-172 (M2162-01A) Aroclor-1254 on front column due to M6

CDE-OU1-NM1-J12-173 (M2162-02A) Aroclor-1254 on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of

the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____11/25/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-I12-172

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2162-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5924F.D/E4H5924R.D

% Moisture: 7.2 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	57	P
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-J12-173

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2162-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H5925F.D/E4H5925R.D

% Moisture: 8.5 Decanted: (Y/N) N Date Received: 11/06/2013

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	150	P
11096-82-5	Aroclor-1260	36	U
37324-23-5	Aroclor-1262	36	U
11100-14-4	Aroclor-1268	36	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74637

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H5920F.D/E4H5920R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74637(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5921F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	90	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	92	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74637(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5921R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	92	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74637(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5922F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	100	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	94	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74637(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74637

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H5922R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/06/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/06/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74637	68		69		60		73				0
02	LCS-74637	63		64		66		79				0
03	LCSD-74637	67		67		64		77				0
04	CDE-OU1-NM1-I12-172	62		61		54	*	59	*			2
05	CDE-OU1-NM1-J12-173	60		58		48	*	57	*			2

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.10.24.A

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Lab Sample ID: LCS-74637 LCS Lot No.:

Date Extracted: 11/06/2013 Date Analyzed (1): 11/06/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	89.7416	67		40-140
Aroclor-1260	133.3330	91.5897	69		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/06/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	92.3158	69		40-140
Aroclor-1260	133.3330	109.5354	82		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.10.24.A

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Lab Sample ID: LCSD-74637 LCS Lot No.:

Date Extracted: 11/06/2013 Date Analyzed (1): 11/06/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	102.6806	77		40-140	14		30
Aroclor-1260	133.3330	94.2254	71		60-130	3.0		30

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/06/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	106.0907	80		40-140	15		30
Aroclor-1260	133.3330	114.2367	86		60-130	5.0		30

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

RPD: 0 out of 4 outside limits.

COMMENTS:

som13.10.21.A

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74637

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

Lab File ID: E4H5920F.D / E4H5920R.D Lab Sample ID: MB-74637

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/06/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/06/2013 Date Analyzed (2): 11/06/2013

Time Analyzed (1): 15:46 Time Analyzed (2): 15:46

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74637	LCS-74637	11/06/2013	11/06/2013
02	LCSD-74637	LCSD-74637	11/06/2013	11/06/2013
03	CDE-OU1-NM1-I12-172	M2162-01A	11/06/2013	11/06/2013
04	CDE-OU1-NM1-J12-173	M2162-02A	11/06/2013	11/06/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699F.D	10/29/2013	15:34	3.262	9.718
02	AR12323N4	E4H5700F.D	10/29/2013	15:52	3.261	9.715
03	AR12421N4	E4H5701F.D	10/29/2013	16:10	3.260	9.713
04	AR12426N4	E4H5702F.D	10/29/2013	16:28	3.260	9.713
05	AR12422N4	E4H5703F.D	10/29/2013	16:46	3.259	9.714
06	AR12423N4	E4H5704F.D	10/29/2013	17:04	3.260	9.715
07	AR12424N4	E4H5705F.D	10/29/2013	17:23	3.260	9.714
08	AR12425N4	E4H5706F.D	10/29/2013	17:41	3.259	9.713
09	AR12481N4	E4H5707F.D	10/29/2013	17:59	3.259	9.713
10	AR12486N4	E4H5708F.D	10/29/2013	18:17	3.259	9.715
11	AR12482N4	E4H5709F.D	10/29/2013	18:35	3.259	9.714
12	AR12483N4	E4H5710F.D	10/29/2013	18:53	3.259	9.713
13	AR12484N4	E4H5711F.D	10/29/2013	19:11	3.259	9.714
14	AR12485N4	E4H5712F.D	10/29/2013	19:29	3.260	9.715
15	AR12541N4	E4H5713F.D	10/29/2013	19:47	3.259	9.714
16	AR12546N4	E4H5714F.D	10/29/2013	20:05	3.259	9.714
17	AR12542N4	E4H5715F.D	10/29/2013	20:23	3.260	9.714
18	AR12543N4	E4H5716F.D	10/29/2013	20:41	3.260	9.714
19	AR12544N4	E4H5717F.D	10/29/2013	20:59	3.260	9.715
20	AR12545N4	E4H5718F.D	10/29/2013	21:17	3.260	9.715
21	AR12623N4	E4H5719F.D	10/29/2013	21:35	3.260	9.714
22	AR12683N4	E4H5720F.D	10/29/2013	21:53	3.259	9.714
23	AR16601N4	E4H5721F.D	10/29/2013	22:11	3.258	9.713
24	AR16606N4	E4H5722F.D	10/29/2013	22:29	3.259	9.714
25	AR16602N4	E4H5723F.D	10/29/2013	22:47	3.259	9.714
26	AR16603N4	E4H5724F.D	10/29/2013	23:05	3.259	9.715
27	AR16604N4	E4H5725F.D	10/29/2013	23:23	3.259	9.714

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.259 DCB: 9.714

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726F.D	10/29/2013	23:41	3.259	9.713
29	AR16603NR	E4H5914F.D	11/6/2013	13:51	3.261	9.720
30	AR12543NR	E4H5915F.D	11/6/2013	14:10	3.257	9.713
31	MB-74637	E4H5920F.D	11/6/2013	15:46	3.256	9.710
32	LCS-74637	E4H5921F.D	11/6/2013	16:04	3.256	9.710
33	LCSD-74637	E4H5922F.D	11/6/2013	16:22	3.256	9.711
34	CDE-OU1-NM1-I12-172	E4H5924F.D	11/6/2013	16:59	3.257	9.710
35	CDE-OU1-NM1-J12-173	E4H5925F.D	11/6/2013	17:17	3.256	9.711
36	AR16603NS	E4H5932F.D	11/6/2013	19:23	3.257	9.709
37	AR12543NS	E4H5933F.D	11/6/2013	19:41	3.256	9.710

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213N4	E4H5699R.D	10/29/2013	15:34	3.975	12.136
02	AR12323N4	E4H5700R.D	10/29/2013	15:52	3.978	12.133
03	AR12421N4	E4H5701R.D	10/29/2013	16:10	3.976	12.133
04	AR12426N4	E4H5702R.D	10/29/2013	16:28	3.975	12.131
05	AR12422N4	E4H5703R.D	10/29/2013	16:46	3.976	12.135
06	AR12423N4	E4H5704R.D	10/29/2013	17:04	3.976	12.134
07	AR12424N4	E4H5705R.D	10/29/2013	17:23	3.977	12.133
08	AR12425N4	E4H5706R.D	10/29/2013	17:41	3.975	12.134
09	AR12481N4	E4H5707R.D	10/29/2013	17:59	3.975	12.133
10	AR12486N4	E4H5708R.D	10/29/2013	18:17	3.976	12.134
11	AR12482N4	E4H5709R.D	10/29/2013	18:35	3.976	12.132
12	AR12483N4	E4H5710R.D	10/29/2013	18:53	3.975	12.133
13	AR12484N4	E4H5711R.D	10/29/2013	19:11	3.975	12.132
14	AR12485N4	E4H5712R.D	10/29/2013	19:29	3.976	12.136
15	AR12541N4	E4H5713R.D	10/29/2013	19:47	3.975	12.134
16	AR12546N4	E4H5714R.D	10/29/2013	20:05	3.976	12.131
17	AR12542N4	E4H5715R.D	10/29/2013	20:23	3.976	12.132
18	AR12543N4	E4H5716R.D	10/29/2013	20:41	3.976	12.134
19	AR12544N4	E4H5717R.D	10/29/2013	20:59	3.976	12.133
20	AR12545N4	E4H5718R.D	10/29/2013	21:17	3.975	12.136
21	AR12623N4	E4H5719R.D	10/29/2013	21:35	3.976	12.133
22	AR12683N4	E4H5720R.D	10/29/2013	21:53	3.976	12.134
23	AR16601N4	E4H5721R.D	10/29/2013	22:11	3.976	12.135
24	AR16606N4	E4H5722R.D	10/29/2013	22:29	3.975	12.135
25	AR16602N4	E4H5723R.D	10/29/2013	22:47	3.976	12.133
26	AR16603N4	E4H5724R.D	10/29/2013	23:05	3.976	12.132
27	AR16604N4	E4H5725R.D	10/29/2013	23:23	3.975	12.136

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2162 Mod. Ref No.: SDG No.: SM2162

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 10/29/2013 10/29/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.975 DCB: 12.134

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605N4	E4H5726R.D	10/29/2013	23:41	3.975	12.134
29	AR16603NR	E4H5914R.D	11/6/2013	13:51	3.969	12.133
30	AR12543NR	E4H5915R.D	11/6/2013	14:10	3.970	12.131
31	MB-74637	E4H5920R.D	11/6/2013	15:46	3.973	12.130
32	LCS-74637	E4H5921R.D	11/6/2013	16:04	3.973	12.130
33	LCSD-74637	E4H5922R.D	11/6/2013	16:22	3.974	12.130
34	CDE-OU1-NM1-I12-172	E4H5924R.D	11/6/2013	16:59	3.973	12.127
35	CDE-OU1-NM1-J12-173	E4H5925R.D	11/6/2013	17:17	3.973	12.129
36	AR16603NS	E4H5932R.D	11/6/2013	19:23	3.974	12.129
37	AR12543NS	E4H5933R.D	11/6/2013	19:41	3.973	12.128

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-05-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

Applicable QS Checklist

QC Inspector Name and Signature

Davis Raver Jr

Date

11-05-13

DAILY CHEMICAL QUALITY CONTROL REPORT

(Page 1 of 2)

Date: 11-05-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Partly Cloudy, 55° F

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: Sample Areas NM4 A, B, C, D. ~~NM5~~ NM1 ~~I-12~~ I, J. Samples I, J were recollected, Primary Samples Collected were collected in wrong Location.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped to Mitkem LAB via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: Secondary Sample NM2-A18 Previosly Collected 10-30-13 Sent for Analysis

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 11-05-13 Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-05-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? SCANNED/EMAIL	X			

Notes/Comments

QC Inspector Name and Signature

Davis Raver Jr

Date

11-05-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-05-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver Jr	[signature]	11-05-13
CQC Systems Manager	William Zaombrana	[signature]	10-25-13

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

OU1, NEWMARKET RIGHT OF WAY
PCB SOIL SAMPLES

89

11/05/13

EARLY AM WEATHER: CLEAR SKIES, 39°F

1015 E. TSCHUDI, D. RAVER ARRIVE TO NM-4 FIGURE 4 EXCAVATION AREA A TO COLLECT SOIL SAMPLES AT 12 AND 18" BLS. SEE PREVIOUS ENTRY ON P. 75 FOR LAB INFO.

D. RAVER ADVANCES HAND AUGER TO 12" BLS TO COLLECT SOIL SAMPLE MATERIAL

1030 COLLECT CDE-OU1-NM4-A12-165 FROM 12" DEPTH

MEASURED ~~ESTIMATED~~ DISTANCE EAST OFF CONCRETE WALL = 16'.

SEE SOIL SAMPLE LOCATION MAP FOR #165/166 OF P. 87. CONTINUE SAMPLING FROM 18" BLS.

1045 COLLECT ~~CDE-NM~~ CDE-OU1-NM4-A18-166

MOVE TO AREA B WITHIN THE FIG 4 / NM4 EXCAVATION AREA. BEGIN ADVANCING AUGER TO 12" BLS.

1100 COLLECT CDE OU1-NM4-B12-167 AT 12" BLS.

CONTINUE TO ADVANCE AUGER TO B18" DEPTH.

1115 COLLECT CDE-OU1-NM4-B18-168 AT 18" DEPTH.

1130 PACK UP FIELD SAMPLING EQUIPMENT AND MOVE TO SES COMPOUND. LATE AM WEATHER UPDATE: PARTLY CLOUDY, CALM WIND, 55°F.

1300 RETURN TO FIELD TO RESUME SAMPLING AT AREAS C AND D OF NM-4 / FIGURE 4.

COLLECTED C12 AND C18 WITHOUT INCIDENT, FULL RECOVERY. SEE P. 91 FOR CONTINUATION

[signature] 11/5/13 [signature]

OUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(90)

PCB SOIL SAMPLE LOG CONT'D

DATE (2013)	TIME	SAMPLE CODE (CDE-OUI...)	MITI ITEM REPORT#	RESULTS
11/5	1030	NM4-A12-165		
11/5	1045	NM4-A18-166		
11/5	1100	NM4-B12-167		
11/5	1115	NM4-B18-168		
11/5	1315	NM4-C12-169		
11/5	1330	NM4-C18.170		
11/5	1345	NM4-D12-171		
~~11/5~~	~~1400~~	~~NM4-D18-172~~	NO SAMPLE-AUGE REFUSAL	
~~11/5~~		~~NM1-I12-2-172~~		
11/5	1430	NM1-I12-172		
11/5	1445	NM1-J12-173		

OUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLE

11/5/13 (91)

1400 - AFTER 5 OFFSETS OUR ATTEMPT TO COLLECT A SAMPLE FROM AREA D AT 18" WAS FAILURE. AUGER REFUSAL AT 12-14", STONES ROCKS DEBRIS, APPARENT ROAD BED AT 14" BLS. NO RECOVERABLE SAMPLE. SEE P. 90 FOR A LOG OF SUCCESSFUL SAMPLE LOCATIONS.

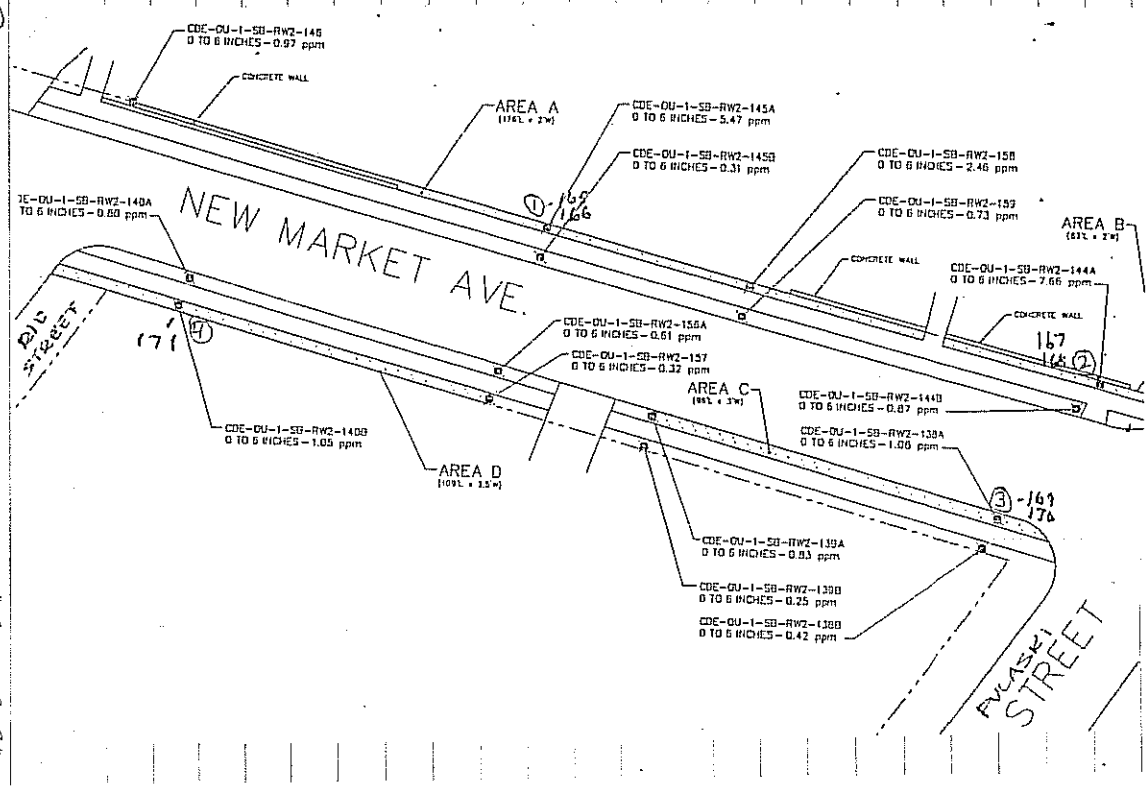
1415 MOVE TO NM1-AREA I TO COLLECT A SECOND SAMPLE AT 12". A 3' OFFSET TO THE WEST HAS BEEN REQUESTED BY DIEGO GARCIA, EPA RPM.

— UPDATE. AFTER A SECOND REVIEW OF SAMPLE LOCATIONS, I, E. TSCHUDI REALIZE I MADE A MISTAKE IN TWO PREVIOUS SAMPLE LOCATIONS. THE SAMPLES COLLECTED IN NM-1-AREAS I AND J, WERE MISTAKENLY COLLECTED IN AREAS H AND G RESPECTIVELY. THEREFORE THERE WASN'T A SAMPLE COLLECTED FOR AREA I AND J PREVIOUSLY BY ME. THE SAMPLE #'S 148, 149, 150, 151 MUST BE VOIDED AND RE SAMPLED.

1430 COLLECT CDE OUI-NM1-I12-172 IN PROPER LOCATION IN AREA I

1445 COLLECT ~~CDE OUI NM1~~ CDE OUI-NM1 J12-173 IN AREA J, SEE MAP ON P. 73.

OU1, NEW MARKET AVE. RIGHT OF WAY
PCB SOIL SAMPLING
NM4-FIGURE-4 SAMPLE LOCATION MAP



'87

OU1, NEWMARKET RIGHT OF WAY
FIG 2/NM2 SAMPLE ~~MAP~~, LOG

DATE/TIME	SAMPLE CODE (CDE-OU1-)	MITKEM REPORT#	RESULT
10/30 1330	NM2-A12-152	11/04 M2116	2.400
10/30 1340	NM2-A18-153		
10/30 1400	NM2-B12-154	M2116	0.390
10/30 1415	NM2-B18-155		
10/31 1045	NM2-C12-156	11/5 M2134	0.120 ~~0.120~~
10/31 1100	NM2-C18-157		
10/31 1115	NM2-D12-158	M2134	0.170
10/31 1130	NM2-D18-159		

NM3 - FIGURE 5

DATE/TIME	SAMPLE CODE CDE-OU1	MITKEM# REPORT	RESULT
10/31 1345	NM3-A12-160	M2134	0.180
10/31 1400	NM3-A18-161		
10/31 1415	NM3-B12-162	M2134	0.560
10/31 1430	NM3-B18-163		

~~NM4 - FIGURE 4~~

~~DATE/TIME~~	~~SAMPLE CODE (CDE-OU1-)~~	~~MITKEM REPORT #~~	~~RESULT~~

RESAMPLE NM1 AREA F DUE TO 18" SAMPLE RESULT BEING ABOVE 1PPM. (SEE SAMPLE LOG ON P. 72).

NM1 - FIGURE 1

DATE/TIME	SAMPLE CODE (CDE-OU1-)	MITKEM REPORT #	RESULT
11/04 1400	NM1-F24-164		

SEE CONTINUATION OF SAMPLE LOG ON P. 90

OU1, NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING

(72) SOIL SAMPLE LOG START: 10/21/13

(2013) DATE/TIME		(OD E OU1-) SAMPLE CODE	MITKEM REPORT #	RESULT
10/21	1400	NM1-A12-131	10/24 M2034	ND
10/21	1415	NM1-A18-132		
10/21	1430	NM1-B12-133	M2034	ND
10/21	1445	NM1-B18-134		
10/22	1330	NM1-C12-135	10/25 M2047	0.210
10/22	1345	NM1-C18-136		
10/22	1400	NM1-D12-137	M2047	0.290
10/22	1415	NM1-D18-138		
10/23	1330	NM1-E12-139	10/28 M2063	1.200
10/23	1345	NM1-E18-140	11/01 M2109	0.100
10/23	1400	NM1-F12-141	M2063	2.600
10/23	1415	NM1-F18-142	11/01 M2109	1.400
10/24	1500	NMROW-143	(WC) M2081	
10/29	1340	NM1-G12-144	11/01 M2109	0.240
10/29	1400	NM1-G18-145		
10/29	1415	NM1-H12-146	11/01 M2109	1.400
10/29	1430	NM1-H18-147		
10/30	1030	NM1-I12-148	11/04 M2116	2.200
10/30	1045	NM1-I18-149		
10/30	1100	NM1-J12-150	M2116	0.620
10/30	1115	NM1-J18-151		

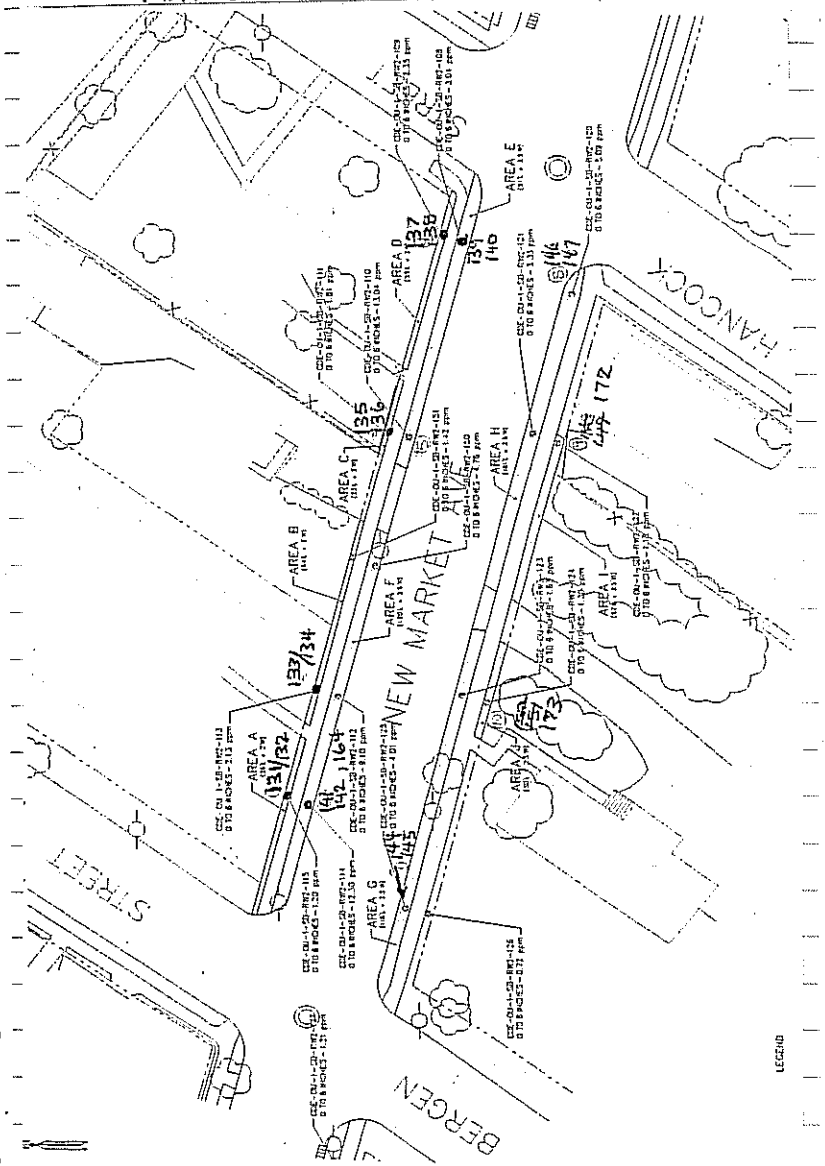
SAMPLE LOG CONTINUED ON P. 82

SAMPLE MAP CONTINUED ON P. 83.

Eric [illegible] 10/30/13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

(73)



Eric [illegible] 10/21/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 24 HOUR
TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs + 1262, 1268	24HR TAT *	TEMP.
	NM2-A18-153	10/30/13	1340	G	SO		1			X		
	NM4-A12-165	11/05/13	1030	G	SO		1			X		
	NM4-B12-167	11/05/13	1100	G	SO		1			X		
	NM4-C12-169	11/05/13	1315	G	SO		1			X		
	NM4-D12-171	11/05/13	1345	G	SO		1			X		
	NM1-I12-172	11/05/13	1430	G	SO		1			X	*	
	NM1-J12-173	11/05/13	1445	G	SO		1			X	*	
	TEMP BLANK											X

Relinquished by:	Received by:	Date:	Time:	Temp°C
ERIC TSCHUDI	FEDEX	11/05/13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@SEVENSON.COM
E-TSCHUDI@SEVENSON.COM

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797084819737
Ship date: 11/05/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 05NOV13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 06 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7970 8481 9737

ED NCOA

02852
RI-US
PVD

51AG1/05E6/1A9E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/20/2013

TRANSMITTAL NO.: 01450A-489

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
70	Info Sample NM1#174,175,176 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #174 failed criteria for PCB's at 2.20 ppm
Sample #175 failed criteria for PCB's at 1.10 ppm
Sample #176 failed criteria for PCB's at 3.80 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
04-Dec-13 11:01

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Davis Raver

Work Order: M2208
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2208-01	CDE-OU1-NM1-F30-174	Soil	12-Nov-13 09:35	13-Nov-13 08:45
M2208-02	CDE-OU1-NM1-FW12-175	Soil	12-Nov-13 09:05	13-Nov-13 08:45
M2208-03	CDE-OU1-NM1-FE12-176	Soil	12-Nov-13 10:30	13-Nov-13 08:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2208

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: Sample ID change for samples 02 and 03.

Case:
SDG:
PO: G2789024

HC Due: 12/02/13
Fax Due: 11/14/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2208-01A	CDE-OU1-NM1-F30-174	11/12/2013 09:35	11/13/2013	Soil	PMoist	/					O1
M2208-01A	CDE-OU1-NM1-F30-174	11/12/2013 09:35	11/13/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O1
M2208-02A	CDE-OU1-NM1-FW12-175	11/12/2013 09:05	11/13/2013	Soil	PMoist	/					O1
M2208-02A	CDE-OU1-NM1-FW12-175	11/12/2013 09:05	11/13/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O1
M2208-03A	CDE-OU1-NM1-FE12-176	11/12/2013 10:30	11/13/2013	Soil	PMoist	/					O1
M2208-03A	CDE-OU1-NM1-FE12-176	11/12/2013 10:30	11/13/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/14/2013 09:10

Lab Client Rep: Agnes R Huntley

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2208

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-F30-174 (M2208-01A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on front column at 135% with criteria of (60-125).

CDE-OU1-NM1-FW12-175 (M2208-02A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on front column at 153% with criteria of (60-125).

CDE-OU1-NM1-FE12-176 (M2208-03A) Surrogate outside of QC limit due to dilution, recovery is below criteria for Decachlorobiphenyl on rear column at 0% with criteria of (60-125), Decachlorobiphenyl on front column at 0% with criteria of (60-125), Tetrachloro-m-xylene on rear column at 0% with criteria of (34-147) and Tetrachloro-m-xylene on front column at 0% with criteria of (34-147).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-F30-174 (M2208-01A) : Dilution Factor: 20
CDE-OU1-NM1-FW12-175 (M2208-02A) : Dilution Factor: 10
CDE-OU1-NM1-FE12-176 (M2208-03A) : Dilution Factor: 25

F. **Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. **Manual Integration**

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

The following samples were manually integrated:

AR12216O4 Aroclor-1221 on front column , Tetrachloro-m-xylene on front column due to M6

AR12321O4 Aroclor-1232 on front column due to M6

AR12322O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12324O4 Aroclor-1232 on front column due to M6

AR12325O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12421O4 Aroclor-1242 on front column due to M6

AR12422O4 Aroclor-1242 on front column due to M6

AR12423O4 Aroclor-1242 on front column due to M6

AR12424O4 Aroclor-1242 on front column due to M6

AR12425O4 Aroclor-1242 on front column due to M6

AR12543O4 Aroclor-1254 on front column due to M6

AR12621O4 Aroclor-1262 on front column due to M6

AR12622O4 Aroclor-1262 on front column due to M6

AR12623O4 Aroclor-1262 on front column due to M6

AR12624O4 Aroclor-1262 on front column due to M6

AR12625O4 Aroclor-1262 on front column due to M6

AR12626O4 Aroclor-1262 on front column due to M6

AR12681O4 Aroclor-1268 on rear column due to M6

AR12682O4 Aroclor-1268 on rear column due to M6

AR12683O4 Aroclor-1268 on rear column due to M6

AR12684O4 Aroclor-1268 on rear column due to M6

AR12685O4 Aroclor-1268 on rear column due to M6

AR12686O4 Aroclor-1268 on rear column due to M6

AR16601O4 Decachlorobiphenyl on front column due to M6

AR16602O4 Decachlorobiphenyl on front column due to M6

AR16606O4 Decachlorobiphenyl on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____12/3/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F30-174

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2208-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H6116F.D/E4H6116R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 11/13/2013

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/13/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	750	U
11104-28-2	Aroclor-1221	750	U
11141-16-5	Aroclor-1232	750	U
53469-21-9	Aroclor-1242	750	U
12672-29-6	Aroclor-1248	750	U
11097-69-1	Aroclor-1254	2200	P
11096-82-5	Aroclor-1260	750	U
37324-23-5	Aroclor-1262	750	U
11100-14-4	Aroclor-1268	750	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FW12-175

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2208-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H6165F.D/E4H6165R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 11/13/2013

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/14/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	370	U
11141-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	1100	
11096-82-5	Aroclor-1260	370	U
37324-23-5	Aroclor-1262	370	U
11100-14-4	Aroclor-1268	370	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FE12-176

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2208-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H6166F.D/E4H6166R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 11/13/2013

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/14/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 25.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	920	U
11104-28-2	Aroclor-1221	920	U
11141-16-5	Aroclor-1232	920	U
53469-21-9	Aroclor-1242	920	U
12672-29-6	Aroclor-1248	920	U
11097-69-1	Aroclor-1254	3800	
11096-82-5	Aroclor-1260	920	U
37324-23-5	Aroclor-1262	920	U
11100-14-4	Aroclor-1268	920	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74739

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74739

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6110F.D/E4H6110R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/13/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74739(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74739

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6111F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/13/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74739(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74739

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6111R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/13/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74739(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74739

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6112F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/13/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-74739(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-74739

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6112R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/13/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/13/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	130	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74739	87		88		92		95				0
02	LCS-74739	83		85		78		81				0
03	LCSD-74739	88		88		91		93				0
04	CDE-OU1-NM1-F30-174	107		111		135	D	122				1
05	CDE-OU1-NM1-FW12-175	96		93		153	D	125				1
06	CDE-OU1-NM1-FE12-176	0	D	0	D	0	D	0	D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.11.29.0851

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74739

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Lab Sample ID: LCS-74739 LCS Lot No.:

Date Extracted: 11/13/2013 Date Analyzed (1): 11/13/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	108.4630	81	40-140
Aroclor-1260	133.3330	106.3235	80	60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/13/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	115.5296	87	40-140
Aroclor-1260	133.3330	116.2159	87	60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.11.20.0851

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-74739

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Lab Sample ID: LCSD-74739 LCS Lot No.:

Date Extracted: 11/13/2013 Date Analyzed (1): 11/13/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	113.3716	85		40-140	5.0		30
Aroclor-1260	133.3330	118.5940	89		60-130	11		30

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/13/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS	%RPD	#	RPD LIMIT
Aroclor-1016	133.3330	121.9810	91		40-140	4.0		30
Aroclor-1260	133.3330	134.3629	101		60-130	15		30

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

RPD: 0 out of 4 outside limits.

COMMENTS:

som13.11.29.0851

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74739

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

Lab File ID: E4H6110F.D / E4H6110R.D Lab Sample ID: MB-74739

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/13/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/13/2013 Date Analyzed (2): 11/13/2013

Time Analyzed (1): 15:34 Time Analyzed (2): 15:34

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74739	LCS-74739	11/13/2013	11/13/2013
02	LCSD-74739	LCSD-74739	11/13/2013	11/13/2013
03	CDE-OU1-NM1-F30-174	M2208-01A	11/13/2013	11/13/2013
04	CDE-OU1-NM1-FW12-175	M2208-02A	11/14/2013	11/14/2013
05	CDE-OU1-NM1-FE12-176	M2208-03A	11/14/2013	11/14/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971F.D	11/8/2013	16:35	3.256	9.712
02	AR122160 4	E4H5972F.D	11/8/2013	16:53	3.256	9.711
03	AR122120 4	E4H5973F.D	11/8/2013	17:11	3.257	9.711
04	AR122130 4	E4H5974F.D	11/8/2013	17:29	3.256	9.710
05	AR122140 4	E4H5975F.D	11/8/2013	17:47	3.256	9.711
06	AR122150 4	E4H5976F.D	11/8/2013	18:05	3.256	9.711
07	AR123210 4	E4H5977F.D	11/8/2013	18:23	3.257	9.711
08	AR123260 4	E4H5978F.D	11/8/2013	18:41	3.257	9.711
09	AR123220 4	E4H5979F.D	11/8/2013	18:59	3.256	9.712
10	AR123230 4	E4H5980F.D	11/8/2013	19:17	3.256	9.710
11	AR123240 4	E4H5981F.D	11/8/2013	19:35	3.257	9.710
12	AR123250 4	E4H5982F.D	11/8/2013	19:53	3.256	9.711
13	AR124210 4	E4H5983F.D	11/8/2013	20:11	3.257	9.710
14	AR124260 4	E4H5984F.D	11/8/2013	20:29	3.256	9.711
15	AR124220 4	E4H5985F.D	11/8/2013	20:47	3.257	9.710
16	AR124230 4	E4H5986F.D	11/8/2013	21:05	3.256	9.710
17	AR124240 4	E4H5987F.D	11/8/2013	21:24	3.256	9.710
18	AR124250 4	E4H5988F.D	11/8/2013	21:42	3.257	9.710
19	AR124810 4	E4H5989F.D	11/8/2013	22:00	3.256	9.710
20	AR124860 4	E4H5990F.D	11/8/2013	22:18	3.257	9.709
21	AR124820 4	E4H5991F.D	11/8/2013	22:36	3.256	9.710
22	AR124830 4	E4H5992F.D	11/8/2013	22:54	3.257	9.710
23	AR124840 4	E4H5993F.D	11/8/2013	23:12	3.256	9.711
24	AR124850 4	E4H5994F.D	11/8/2013	23:30	3.257	9.709
25	AR125410 4	E4H5995F.D	11/8/2013	23:48	3.256	9.709
26	AR125460 4	E4H5996F.D	11/9/2013	0:06	3.256	9.711
27	AR125420 4	E4H5997F.D	11/9/2013	0:24	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998F.D	11/9/2013	0:42	3.257	9.710
29	AR125440 4	E4H5999F.D	11/9/2013	1:00	3.256	9.709
30	AR125450 4	E4H6000F.D	11/9/2013	1:18	3.257	9.710
31	AR126210 4	E4H6001F.D	11/9/2013	1:36	3.256	9.709
32	AR126260 4	E4H6002F.D	11/9/2013	1:54	3.256	9.710
33	AR126220 4	E4H6003F.D	11/9/2013	2:13	3.256	9.709
34	AR126230 4	E4H6004F.D	11/9/2013	2:31	3.256	9.710
35	AR126240 4	E4H6005F.D	11/9/2013	2:49	3.257	9.709
36	AR126250 4	E4H6006F.D	11/9/2013	3:07	3.256	9.710
37	AR126810 4	E4H6007F.D	11/9/2013	3:25	3.256	9.710
38	AR126860 4	E4H6008F.D	11/9/2013	3:43	3.256	9.710
39	AR126820 4	E4H6009F.D	11/9/2013	4:01	3.256	9.710
40	AR126830 4	E4H6010F.D	11/9/2013	4:19	3.256	9.711
41	AR126840 4	E4H6011F.D	11/9/2013	4:37	3.256	9.710
42	AR126850 4	E4H6012F.D	11/9/2013	4:55	3.256	9.709
43	AR166010 4	E4H6013F.D	11/9/2013	5:13	3.255	9.710
44	AR166060 4	E4H6014F.D	11/9/2013	5:31	3.256	9.710
45	AR166020 4	E4H6015F.D	11/9/2013	5:49	3.255	9.710
46	AR166030 4	E4H6016F.D	11/9/2013	6:07	3.256	9.709
47	AR166040 4	E4H6017F.D	11/9/2013	6:26	3.256	9.709
48	AR166050 4	E4H6018F.D	11/9/2013	6:44	3.256	9.711
49	AR166030 I	E4H6104F.D	11/13/2013	13:45	3.254	9.711
50	AR125430 I	E4H6105F.D	11/13/2013	14:03	3.255	9.710
51	MB-74739	E4H6110F.D	11/13/2013	15:34	3.257	9.710
52	LCS-74739	E4H6111F.D	11/13/2013	15:52	3.255	9.710
53	LCSD-74739	E4H6112F.D	11/13/2013	16:10	3.256	9.708

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-F30-174	E4H6116F.D	11/13/2013	17:22	3.255	9.707
55	AR16603OJ	E4H6137F.D	11/13/2013	23:41	3.256	9.709
56	AR12543OJ	E4H6138F.D	11/13/2013	23:59	3.256	9.710
57	CDE-OU1-NM1-FW12-175	E4H6165F.D	11/14/2013	8:05	3.255	9.705
58	CDE-OU1-NM1-FE12-176	E4H6166F.D	11/14/2013	8:42	*	*
59	AR16603OK	E4H6168F.D	11/14/2013	9:18	3.255	9.710
60	AR12543OK	E4H6169F.D	11/14/2013	9:36	3.255	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971R.D	11/8/2013	16:35	3.973	12.131
02	AR122160 4	E4H5972R.D	11/8/2013	16:53	3.973	12.129
03	AR122120 4	E4H5973R.D	11/8/2013	17:11	3.973	12.129
04	AR122130 4	E4H5974R.D	11/8/2013	17:29	3.973	12.130
05	AR122140 4	E4H5975R.D	11/8/2013	17:47	3.973	12.127
06	AR122150 4	E4H5976R.D	11/8/2013	18:05	3.972	12.131
07	AR123210 4	E4H5977R.D	11/8/2013	18:23	3.974	12.128
08	AR123260 4	E4H5978R.D	11/8/2013	18:41	3.972	12.126
09	AR123220 4	E4H5979R.D	11/8/2013	18:59	3.973	12.128
10	AR123230 4	E4H5980R.D	11/8/2013	19:17	3.973	12.128
11	AR123240 4	E4H5981R.D	11/8/2013	19:35	3.973	12.130
12	AR123250 4	E4H5982R.D	11/8/2013	19:53	3.973	12.131
13	AR124210 4	E4H5983R.D	11/8/2013	20:11	3.973	12.129
14	AR124260 4	E4H5984R.D	11/8/2013	20:29	3.973	12.126
15	AR124220 4	E4H5985R.D	11/8/2013	20:47	3.973	12.128
16	AR124230 4	E4H5986R.D	11/8/2013	21:05	3.973	12.128
17	AR124240 4	E4H5987R.D	11/8/2013	21:24	3.973	12.128
18	AR124250 4	E4H5988R.D	11/8/2013	21:42	3.974	12.130
19	AR124810 4	E4H5989R.D	11/8/2013	22:00	3.973	12.130
20	AR124860 4	E4H5990R.D	11/8/2013	22:18	3.974	12.130
21	AR124820 4	E4H5991R.D	11/8/2013	22:36	3.973	12.130
22	AR124830 4	E4H5992R.D	11/8/2013	22:54	3.974	12.129
23	AR124840 4	E4H5993R.D	11/8/2013	23:12	3.973	12.129
24	AR124850 4	E4H5994R.D	11/8/2013	23:30	3.974	12.127
25	AR125410 4	E4H5995R.D	11/8/2013	23:48	3.973	12.130
26	AR125460 4	E4H5996R.D	11/9/2013	0:06	3.973	12.131
27	AR125420 4	E4H5997R.D	11/9/2013	0:24	3.974	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998R.D	11/9/2013	0:42	3.974	12.131
29	AR125440 4	E4H5999R.D	11/9/2013	1:00	3.973	12.128
30	AR125450 4	E4H6000R.D	11/9/2013	1:18	3.973	12.132
31	AR126210 4	E4H6001R.D	11/9/2013	1:36	3.974	12.132
32	AR126260 4	E4H6002R.D	11/9/2013	1:54	3.973	12.132
33	AR126220 4	E4H6003R.D	11/9/2013	2:13	3.972	12.128
34	AR126230 4	E4H6004R.D	11/9/2013	2:31	3.972	12.129
35	AR126240 4	E4H6005R.D	11/9/2013	2:49	3.974	12.129
36	AR126250 4	E4H6006R.D	11/9/2013	3:07	3.973	12.130
37	AR126810 4	E4H6007R.D	11/9/2013	3:25	3.973	12.130
38	AR126860 4	E4H6008R.D	11/9/2013	3:43	3.973	12.127
39	AR126820 4	E4H6009R.D	11/9/2013	4:01	3.974	12.128
40	AR126830 4	E4H6010R.D	11/9/2013	4:19	3.972	12.129
41	AR126840 4	E4H6011R.D	11/9/2013	4:37	3.972	12.128
42	AR126850 4	E4H6012R.D	11/9/2013	4:55	3.973	12.129
43	AR166010 4	E4H6013R.D	11/9/2013	5:13	3.973	12.126
44	AR166060 4	E4H6014R.D	11/9/2013	5:31	3.973	12.131
45	AR166020 4	E4H6015R.D	11/9/2013	5:49	3.971	12.131
46	AR166030 4	E4H6016R.D	11/9/2013	6:07	3.972	12.129
47	AR166040 4	E4H6017R.D	11/9/2013	6:26	3.973	12.129
48	AR166050 4	E4H6018R.D	11/9/2013	6:44	3.972	12.129
49	AR16603OI	E4H6104R.D	11/13/2013	13:45	3.969	12.125
50	AR125430I	E4H6105R.D	11/13/2013	14:03	3.971	12.127
51	MB-74739	E4H6110R.D	11/13/2013	15:34	3.972	12.129
52	LCS-74739	E4H6111R.D	11/13/2013	15:52	3.971	12.131
53	LCSD-74739	E4H6112R.D	11/13/2013	16:10	3.971	12.125

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2208 Mod. Ref No.: SDG No.: SM2208

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-F30-174	E4H6116R.D	11/13/2013	17:22	3.971	12.128
55	AR166030J	E4H6137R.D	11/13/2013	23:41	3.972	12.128
56	AR125430J	E4H6138R.D	11/13/2013	23:59	3.971	12.129
57	CDE-OU1-NM1-FW12-175	E4H6165R.D	11/14/2013	8:05	3.971	12.129
58	CDE-OU1-NM1-FE12-176	E4H6166R.D	11/14/2013	8:42	*	*
59	AR166030K	E4H6168R.D	11/14/2013	9:18	3.971	12.130
60	AR125430K	E4H6169R.D	11/14/2013	9:36	3.972	12.126

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-12-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	✓		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments Applicable QC Checklist

QC Inspector Name and Signature

Davis Raver Jr
DR

Date

11-12-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11-12-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Clear, 36° F

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: Modified Level D, Personal Protective Equipment

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: Collect NM1 - Area F Samples. 7 Samples Collected @ AREA F. 5' offset from original East and West @ 3 depths. 30" depth Collected @ original Location.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped to MitKem LAB via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: Secondary Samples Collected will be sent to Lab pending results of Primary Samples

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-12-13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-12-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

Davis Rawan

Date

11-12-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 7-12-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	Davis Rauer Jr	[signature]	11-12-13
CQC Systems Manager	Miller Zambrana	[signature]	11-12-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

11-12-13 Special Handling: 24 HR

TAT- Indicate Date Needed: ~~2 DAY~~

- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS 1-1262, 1268	TEMP
	NM1-F30-174	11-12-13	0935	G	SO		1			X	
	NM1-FW12-175	11-12-13	0905	G	SO		1			X	
	NM1-FE12-176	11-12-13	1030	G	SO		1			X	
	Temperature Blank										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
Davis Raver	FED EX	11-12-13	1700	

☐ EDD Format
☒ E-mail to KLICKFIELD@Sevenson.com
DRAVER@sevenson.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J13201306280326

Ship Date: 12NOV13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400

BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

WED - 13 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7971 3634 4584
0201

ED NCOA

02852
RI-US
PVD

51AG1/D5E6/1A9E

/templates/components/dotcom_label_contents/FoldInstr/en/Folding_instructions.html loading...
/templates/components/dotcom_label_contents/WarningsOriginalLabel/en/Folding_warning.html loading...
/templates/components/dotcom_label_contents/TnCDom/us/en/TC_dom.html loading...

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797136344584
Ship date: 11/12/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note
FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

92

OU1 New Market Right of Way
PCB Soil Sampling
Snow, Rain, Cloudy 36° 11-12-13

Collecting Sample NM1-F. NM1 F Failed at 12", 18", 24". Collecting samples as per Diego Garcia EPA/RPM 30" @ original Location. Collecting #6 Samples @ F Location on 5' offsets from original Location. 5' East, 5' west. Amended Sample ID #

CDE-OU1-NM1-~~FE12~~ FE12-175
" EAST

~~Example~~ FW12-176
Example WEST

Samples Collected

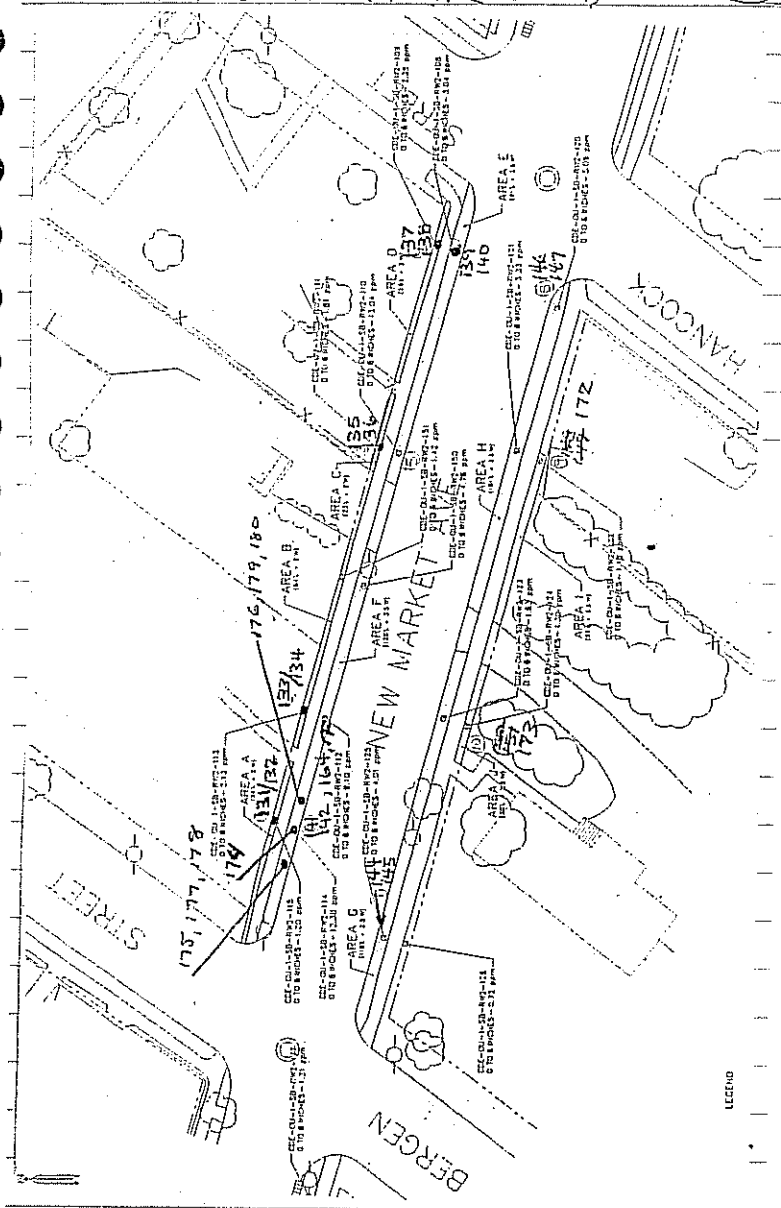
DATE	TIME	Sample CODE CDE-OU1	Mitkem #	Results
11/12	0925	NM1-F30-174		
11/12	0905	NM1-FW12-175		
11/12	1030	NM1-FE12-176		
11/12	0915	NM1-FW18-177		
11/12	0925	NM1-FW24-178		
11/12	1035	NM1-FE18-179		
11/12	1045	NM1-FE24-180		

See map Pg (73) for updated sample locations
Samples 174, 175, 176 collected Packed and shipped.

[signature] 11-12-13

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

73



10/21/13

"Rite in the Rain"

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/20/2013

TRANSMITTAL NO.: 01450A-490

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
71	Info Sample NM1#179 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #179 failed criteria for PCB's at 1.00 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
09-Dec-13 15:59

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Work Order: M2253
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Attn: Davis Raver

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
[redacted]				
M2253-02	CDE-OU1-NM1-FE18-179	Soil	12-Nov-13 10:35	16-Nov-13 09:34
[redacted]				

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2253

M2253

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 12/05/13
Fax Due: 11/20/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2253-01A	CDE-OU1-NM1-FW18-177	11/12/2013 09:15	11/16/2013	Soil	PMoist	/					D3
M2253-01A	CDE-OU1-NM1-FW18-177	11/12/2013 09:15	11/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2253-02A	CDE-OU1-NM1-FE18-179	11/12/2013 10:35	11/16/2013	Soil	PMoist	/					D3
M2253-02A	CDE-OU1-NM1-FE18-179	11/12/2013 10:35	11/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2253-03A	CDE-OU1-NM1-F36-186	11/15/2013 13:20	11/16/2013	Soil	PMoist	/					D3
M2253-03A	CDE-OU1-NM1-F36-186	11/15/2013 13:20	11/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/18/2013 11:43

Lab Client Rep: Agnes R Huntley

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* PCB Organics *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

M2253

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2253

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-FW18-177 (M2253-01A) : Dilution Factor: 2
CDE-OU1-NM1-FE18-179 (M2253-02A) : Dilution Factor: 5

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AR12216O4 Aroclor-1221 on front column , Tetrachloro-m-xylene on front column due to M6

AR12321O4 Aroclor-1232 on front column due to M6

AR12322O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12324O4 Aroclor-1232 on front column due to M6

AR12325O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12421O4 Aroclor-1242 on front column due to M6

AR12422O4 Aroclor-1242 on front column due to M6

AR12423O4 Aroclor-1242 on front column due to M6

AR12424O4 Aroclor-1242 on front column due to M6

AR12425O4 Aroclor-1242 on front column due to M6

AR12543O4 Aroclor-1254 on front column due to M6

AR12621O4 Aroclor-1262 on front column due to M6

AR12622O4 Aroclor-1262 on front column due to M6

AR12623O4 Aroclor-1262 on front column due to M6

AR12624O4 Aroclor-1262 on front column due to M6

AR12625O4 Aroclor-1262 on front column due to M6

AR12626O4 Aroclor-1262 on front column due to M6

AR12681O4 Aroclor-1268 on rear column due to M6

AR12682O4 Aroclor-1268 on rear column due to M6

AR12683O4 Aroclor-1268 on rear column due to M6

AR12684O4 Aroclor-1268 on rear column due to M6

AR12685O4 Aroclor-1268 on rear column due to M6

AR12686O4 Aroclor-1268 on rear column due to M6

AR16601O4 Decachlorobiphenyl on front column due to M6

AR16602O4 Decachlorobiphenyl on front column due to M6

AR16606O4 Decachlorobiphenyl on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____12/9/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FW18-17

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2253-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6267F.D/E4H6267R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 11/16/2013

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	76	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	76	U
53469-21-9	Aroclor-1242	76	U
12672-29-6	Aroclor-1248	76	U
11097-69-1	Aroclor-1254	510	
11096-82-5	Aroclor-1260	76	U
37324-23-5	Aroclor-1262	76	U
11100-14-4	Aroclor-1268	76	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FE18-17

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2253-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H6268F.D/E4H6268R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 11/16/2013

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	1000	
11096-82-5	Aroclor-1260	190	U
37324-23-5	Aroclor-1262	190	U
11100-14-4	Aroclor-1268	190	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F36-186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2253-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6266F.D/E4H6266R.D

% Moisture: 17 Decanted: (Y/N) N Date Received: 11/16/2013

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	350	
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74821

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74821

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6262F.D/E4H6262R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74821(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74821

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6263F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74821(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74821

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6263R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	130	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74821	87	94	85	101			0
02	LCS-74821	82	89	80	93			0
03	CDE-OU1-NM1-F36-186	78	80	63	72			0
04	CDE-OU1-NM1-FW18-17	80	87	69	83			0
05	CDE-OU1-NM1-FE18-17	90	102	92	110			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.12.05.06.1059

Page 1 of 1

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74821

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Lab Sample ID: LCS-74821 LCS Lot No.:

Date Extracted: 11/18/2013 Date Analyzed (1): 11/19/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	112.9172	85		40-140
Aroclor-1260	133.3330	114.2553	86		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/19/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	127.8190	96		40-140
Aroclor-1260	133.3330	139.2877	104		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.12.05.06.1059

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74821

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Lab File ID: E4H6262F.D / E4H6262R.D Lab Sample ID: MB-74821

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/18/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/19/2013 Date Analyzed (2): 11/19/2013

Time Analyzed (1): 10:53 Time Analyzed (2): 10:53

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74821	LCS-74821	11/19/2013	11/19/2013
02	CDE-OU1-NM1-F36-186	M2253-03A	11/19/2013	11/19/2013
03	CDE-OU1-NM1-FW18-17	M2253-01A	11/19/2013	11/19/2013
04	CDE-OU1-NM1-FE18-17	M2253-02A	11/19/2013	11/19/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971F.D	11/8/2013	16:35	3.256	9.712
02	AR122160 4	E4H5972F.D	11/8/2013	16:53	3.256	9.711
03	AR122120 4	E4H5973F.D	11/8/2013	17:11	3.257	9.711
04	AR122130 4	E4H5974F.D	11/8/2013	17:29	3.256	9.710
05	AR122140 4	E4H5975F.D	11/8/2013	17:47	3.256	9.711
06	AR122150 4	E4H5976F.D	11/8/2013	18:05	3.256	9.711
07	AR123210 4	E4H5977F.D	11/8/2013	18:23	3.257	9.711
08	AR123260 4	E4H5978F.D	11/8/2013	18:41	3.257	9.711
09	AR123220 4	E4H5979F.D	11/8/2013	18:59	3.256	9.712
10	AR123230 4	E4H5980F.D	11/8/2013	19:17	3.256	9.710
11	AR123240 4	E4H5981F.D	11/8/2013	19:35	3.257	9.710
12	AR123250 4	E4H5982F.D	11/8/2013	19:53	3.256	9.711
13	AR124210 4	E4H5983F.D	11/8/2013	20:11	3.257	9.710
14	AR124260 4	E4H5984F.D	11/8/2013	20:29	3.256	9.711
15	AR124220 4	E4H5985F.D	11/8/2013	20:47	3.257	9.710
16	AR124230 4	E4H5986F.D	11/8/2013	21:05	3.256	9.710
17	AR124240 4	E4H5987F.D	11/8/2013	21:24	3.256	9.710
18	AR124250 4	E4H5988F.D	11/8/2013	21:42	3.257	9.710
19	AR124810 4	E4H5989F.D	11/8/2013	22:00	3.256	9.710
20	AR124860 4	E4H5990F.D	11/8/2013	22:18	3.257	9.709
21	AR124820 4	E4H5991F.D	11/8/2013	22:36	3.256	9.710
22	AR124830 4	E4H5992F.D	11/8/2013	22:54	3.257	9.710
23	AR124840 4	E4H5993F.D	11/8/2013	23:12	3.256	9.711
24	AR124850 4	E4H5994F.D	11/8/2013	23:30	3.257	9.709
25	AR125410 4	E4H5995F.D	11/8/2013	23:48	3.256	9.709
26	AR125460 4	E4H5996F.D	11/9/2013	0:06	3.256	9.711
27	AR125420 4	E4H5997F.D	11/9/2013	0:24	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998F.D	11/9/2013	0:42	3.257	9.710
29	AR125440 4	E4H5999F.D	11/9/2013	1:00	3.256	9.709
30	AR125450 4	E4H6000F.D	11/9/2013	1:18	3.257	9.710
31	AR126210 4	E4H6001F.D	11/9/2013	1:36	3.256	9.709
32	AR126260 4	E4H6002F.D	11/9/2013	1:54	3.256	9.710
33	AR126220 4	E4H6003F.D	11/9/2013	2:13	3.256	9.709
34	AR126230 4	E4H6004F.D	11/9/2013	2:31	3.256	9.710
35	AR126240 4	E4H6005F.D	11/9/2013	2:49	3.257	9.709
36	AR126250 4	E4H6006F.D	11/9/2013	3:07	3.256	9.710
37	AR126810 4	E4H6007F.D	11/9/2013	3:25	3.256	9.710
38	AR126860 4	E4H6008F.D	11/9/2013	3:43	3.256	9.710
39	AR126820 4	E4H6009F.D	11/9/2013	4:01	3.256	9.710
40	AR126830 4	E4H6010F.D	11/9/2013	4:19	3.256	9.711
41	AR126840 4	E4H6011F.D	11/9/2013	4:37	3.256	9.710
42	AR126850 4	E4H6012F.D	11/9/2013	4:55	3.256	9.709
43	AR166010 4	E4H6013F.D	11/9/2013	5:13	3.255	9.710
44	AR166060 4	E4H6014F.D	11/9/2013	5:31	3.256	9.710
45	AR166020 4	E4H6015F.D	11/9/2013	5:49	3.255	9.710
46	AR166030 4	E4H6016F.D	11/9/2013	6:07	3.256	9.709
47	AR166040 4	E4H6017F.D	11/9/2013	6:26	3.256	9.709
48	AR166050 4	E4H6018F.D	11/9/2013	6:44	3.256	9.711
49	AR16603OR	E4H6256F.D	11/19/2013	8:43	3.256	9.710
50	AR12543OR	E4H6257F.D	11/19/2013	9:01	3.257	9.710
51	MB-74821	E4H6262F.D	11/19/2013	10:53	3.258	9.710
52	LCS-74821	E4H6263F.D	11/19/2013	11:11	3.258	9.709
53	CDE-OU1-NM1-F36-186	E4H6266F.D	11/19/2013	12:06	3.256	9.709

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-FW18-17	E4H6267F.D	11/19/2013	12:23	3.255	9.709
55	CDE-OU1-NM1-FE18-17	E4H6268F.D	11/19/2013	12:41	3.255	9.708
56	AR166030S	E4H6270F.D	11/19/2013	13:17	3.255	9.710
57	AR125430S	E4H6271F.D	11/19/2013	13:35	3.255	9.708

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971R.D	11/8/2013	16:35	3.973	12.131
02	AR122160 4	E4H5972R.D	11/8/2013	16:53	3.973	12.129
03	AR122120 4	E4H5973R.D	11/8/2013	17:11	3.973	12.129
04	AR122130 4	E4H5974R.D	11/8/2013	17:29	3.973	12.130
05	AR122140 4	E4H5975R.D	11/8/2013	17:47	3.973	12.127
06	AR122150 4	E4H5976R.D	11/8/2013	18:05	3.972	12.131
07	AR123210 4	E4H5977R.D	11/8/2013	18:23	3.974	12.128
08	AR123260 4	E4H5978R.D	11/8/2013	18:41	3.972	12.126
09	AR123220 4	E4H5979R.D	11/8/2013	18:59	3.973	12.128
10	AR123230 4	E4H5980R.D	11/8/2013	19:17	3.973	12.128
11	AR123240 4	E4H5981R.D	11/8/2013	19:35	3.973	12.130
12	AR123250 4	E4H5982R.D	11/8/2013	19:53	3.973	12.131
13	AR124210 4	E4H5983R.D	11/8/2013	20:11	3.973	12.129
14	AR124260 4	E4H5984R.D	11/8/2013	20:29	3.973	12.126
15	AR124220 4	E4H5985R.D	11/8/2013	20:47	3.973	12.128
16	AR124230 4	E4H5986R.D	11/8/2013	21:05	3.973	12.128
17	AR124240 4	E4H5987R.D	11/8/2013	21:24	3.973	12.128
18	AR124250 4	E4H5988R.D	11/8/2013	21:42	3.974	12.130
19	AR124810 4	E4H5989R.D	11/8/2013	22:00	3.973	12.130
20	AR124860 4	E4H5990R.D	11/8/2013	22:18	3.974	12.130
21	AR124820 4	E4H5991R.D	11/8/2013	22:36	3.973	12.130
22	AR124830 4	E4H5992R.D	11/8/2013	22:54	3.974	12.129
23	AR124840 4	E4H5993R.D	11/8/2013	23:12	3.973	12.129
24	AR124850 4	E4H5994R.D	11/8/2013	23:30	3.974	12.127
25	AR125410 4	E4H5995R.D	11/8/2013	23:48	3.973	12.130
26	AR125460 4	E4H5996R.D	11/9/2013	0:06	3.973	12.131
27	AR125420 4	E4H5997R.D	11/9/2013	0:24	3.974	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998R.D	11/9/2013	0:42	3.974	12.131
29	AR125440 4	E4H5999R.D	11/9/2013	1:00	3.973	12.128
30	AR125450 4	E4H6000R.D	11/9/2013	1:18	3.973	12.132
31	AR126210 4	E4H6001R.D	11/9/2013	1:36	3.974	12.132
32	AR126260 4	E4H6002R.D	11/9/2013	1:54	3.973	12.132
33	AR126220 4	E4H6003R.D	11/9/2013	2:13	3.972	12.128
34	AR126230 4	E4H6004R.D	11/9/2013	2:31	3.972	12.129
35	AR126240 4	E4H6005R.D	11/9/2013	2:49	3.974	12.129
36	AR126250 4	E4H6006R.D	11/9/2013	3:07	3.973	12.130
37	AR126810 4	E4H6007R.D	11/9/2013	3:25	3.973	12.130
38	AR126860 4	E4H6008R.D	11/9/2013	3:43	3.973	12.127
39	AR126820 4	E4H6009R.D	11/9/2013	4:01	3.974	12.128
40	AR126830 4	E4H6010R.D	11/9/2013	4:19	3.972	12.129
41	AR126840 4	E4H6011R.D	11/9/2013	4:37	3.972	12.128
42	AR126850 4	E4H6012R.D	11/9/2013	4:55	3.973	12.129
43	AR166010 4	E4H6013R.D	11/9/2013	5:13	3.973	12.126
44	AR166060 4	E4H6014R.D	11/9/2013	5:31	3.973	12.131
45	AR166020 4	E4H6015R.D	11/9/2013	5:49	3.971	12.131
46	AR166030 4	E4H6016R.D	11/9/2013	6:07	3.972	12.129
47	AR166040 4	E4H6017R.D	11/9/2013	6:26	3.973	12.129
48	AR166050 4	E4H6018R.D	11/9/2013	6:44	3.972	12.129
49	AR16603OR	E4H6256R.D	11/19/2013	8:43	3.972	12.125
50	AR12543OR	E4H6257R.D	11/19/2013	9:01	3.972	12.122
51	MB-74821	E4H6262R.D	11/19/2013	10:53	3.973	12.128
52	LCS-74821	E4H6263R.D	11/19/2013	11:11	3.973	12.127
53	CDE-OU1-NM1-F36-186	E4H6266R.D	11/19/2013	12:06	3.972	12.124

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-FW18-17	E4H6267R.D	11/19/2013	12:23	3.972	12.123
55	CDE-OU1-NM1-FE18-17	E4H6268R.D	11/19/2013	12:41	3.971	12.124
56	AR166030S	E4H6270R.D	11/19/2013	13:17	3.970	12.127
57	AR125430S	E4H6271R.D	11/19/2013	13:35	3.972	12.126

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-15-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments Applicable QC Checklist

QC Inspector Name and Signature

Davis Raver

Date

11-15-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11-15-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Clear 50°

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Sample NM1-Area F. #F36 collected, Refusal @ 39" no sample @ 42". CDE-OU1-NM1-F36-186 Sent to mitKem for Analysis.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped ~~via~~ to MitKem LAB via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: CDE-011-NM1-FW18-177, CDE-011-NM1-FE18-179 Sent for Analysis

Non-conformance Problems: NONE

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature: [signature] Date: 11-15-13

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-15-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

Davis Ravek

Date

11-15-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-15-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver	[signature]	11-15-15
CQC Systems Manager	[illegible]	[signature]	11-15-15

DUI SOIL SAMPLE
LOG BOOK 2 of

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

011 NEW MARKET ROW
PCB Soil Sampling

11-15-13

Weather: Clear, 50°

Collecting Samples @ NMI - Area F.

Area F continued Failures. As

Per Diego Garcia EPA/RPM

Collect 36" Sample, 42" Sample.

Sending hold Samples FW-18,

FE18. Send @ F36 Sample, Hold

F42 Sample.

* SEE page 92 For FW18, FE18 Log.

* SEE page 73 For map Locations.

* Sample Refusal @ 39". No Sample

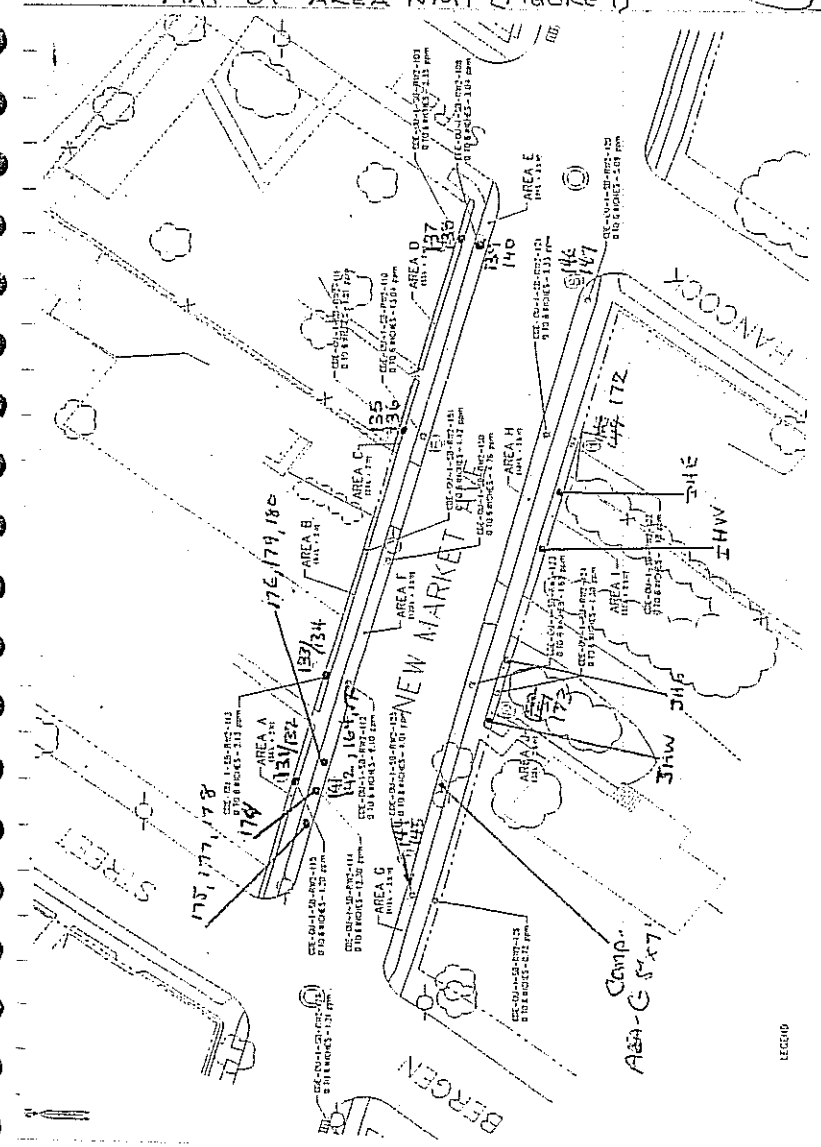
@ F42. Samples shipped to Mitkem 48T/A

DATE/TIME	Sample Code	Mitkem Report	Results
11-15-13 1320	CDE-011-NMI-F36-186		

11-15-13

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

73



10/21/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI / D. RAVER

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs +1262, 1268	Temp Blank							
	NM1-FW18-177	11-12-13	0915	G	SO		1			X								
	NM1-FE18-178	11-12-13	1035	G	SO		1			X								
	NM1-F36-186	11-15-13	1320	G	SO		1			X								
	Temp Blank										X							

Relinquished by:	Received by:	Date:	Time:	Temp°C
DRP Davis Raver	FedEx	11-15-13	1700	

☐ EDD Format
☒ E-mail to KLickfield@sevenson.com
DRaver@sevenson.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Davis Raver
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797169360593
Ship date: 11/15/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services: Saturday delivery
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

From: (908) 769-5301 Origin ID: LDJA
Davis Raver
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

FedEx Express

Ship Date: 15NOV13
ActWgt: 25.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT
Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7971 6936 0593
0201

X0 NCOA

02852
RI-US
PVD

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/20/2013

TRANSMITTAL NO.: 01450A-491

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
72	Info Sample NM1#181,182,183,184,185- ROW	TEST REPORTS	2	1.4		A	N	

REMARKS

Sample #181 failed criteria for PCB's at 1.10 ppm
Sample #182 failed criteria for PCB's at 1.60 ppm
Sample #183 failed criteria for PCB's at 2.50 ppm
Sample #184 failed criteria for PCB's at 1.10 ppm
Sample #185 failed criteria for PCB's at 2.70 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
04-Dec-13 11:08

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Davis Raver

Work Order: M2221
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2221-01	CDE-OU1-NM1-JHW6-181	Soil	13-Nov-13 10:30	14-Nov-13 08:40
M2221-02	CDE-OU1-NM1-JHE6-182	Soil	13-Nov-13 10:40	14-Nov-13 08:40
M2221-03	CDE-OU1-NM1-IHW6-183	Soil	13-Nov-13 10:50	14-Nov-13 08:40
M2221-04	CDE-OU1-NM1-IHE6-184	Soil	13-Nov-13 11:00	14-Nov-13 08:40
M2221-05	CDE-OU1-NM1-G-COMP-185	Soil	13-Nov-13 11:15	14-Nov-13 08:40

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2221

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 12/03/13
Fax Due: 11/15/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2221-01A	CDE-OU1-NM1-JHW6-181	11/13/2013 10:30	11/14/2013	Soil	PMoist	/					O2
M2221-01A	CDE-OU1-NM1-JHW6-181	11/13/2013 10:30	11/14/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O2
M2221-02A	CDE-OU1-NM1-JHE6-182	11/13/2013 10:40	11/14/2013	Soil	PMoist	/					O2
M2221-02A	CDE-OU1-NM1-JHE6-182	11/13/2013 10:40	11/14/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O2
M2221-03A	CDE-OU1-NM1-IHW6-183	11/13/2013 10:50	11/14/2013	Soil	PMoist	/					O2
M2221-03A	CDE-OU1-NM1-IHW6-183	11/13/2013 10:50	11/14/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O2
M2221-04A	CDE-OU1-NM1-IHE6-184	11/13/2013 11:00	11/14/2013	Soil	PMoist	/					O2
M2221-04A	CDE-OU1-NM1-IHE6-184	11/13/2013 11:00	11/14/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O2
M2221-05A	CDE-OU1-NM1-G-COMP-185	11/13/2013 11:15	11/14/2013	Soil	PMoist	/					O2
M2221-05A	CDE-OU1-NM1-G-COMP-185	11/13/2013 11:15	11/14/2013	Soil	SW8082_S	/ + AR1262,1268				Y	O2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/15/2013 10:17 Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2221

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

CDE-OU1-NM1-JHE6-182 (M2221-02A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 136% with criteria of (60-125) and Decachlorobiphenyl on front column at 136% with criteria of (60-125).

CDE-OU1-NM1-IHW6-183 (M2221-03A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 130% with criteria of (60-125) and Decachlorobiphenyl on front column at 128% with criteria of (60-125).

CDE-OU1-NM1-IHE6-184 (M2221-04A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 127% with criteria of (60-125).

CDE-OU1-NM1-G-COMP-185 (M2221-05A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on rear column at 144% with criteria of (60-125) and Decachlorobiphenyl on front column at 142% with criteria of (60-125).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. **Dilutions:**

The following samples were analyzed at dilution:

CDE-OU1-NM1-JHW6-181 (M2221-01A) : Dilution Factor: 10
CDE-OU1-NM1-JHE6-182 (M2221-02A) : Dilution Factor: 10
CDE-OU1-NM1-IHW6-183 (M2221-03A) : Dilution Factor: 10
CDE-OU1-NM1-IHE6-184 (M2221-04A) : Dilution Factor: 20
CDE-OU1-NM1-G-COMP-185 (M2221-05A) : Dilution Factor: 20

F. **Samples:**

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. **Manual Integration**

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

The following samples were manually integrated:

AR12216O4 Aroclor-1221 on front column , Tetrachloro-m-xylene on front column due to M6

AR12321O4 Aroclor-1232 on front column due to M6

AR12322O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12324O4 Aroclor-1232 on front column due to M6

AR12325O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12421O4 Aroclor-1242 on front column due to M6

AR12422O4 Aroclor-1242 on front column due to M6

AR12423O4 Aroclor-1242 on front column due to M6

AR12424O4 Aroclor-1242 on front column due to M6

AR12425O4 Aroclor-1242 on front column due to M6

AR12543O4 Aroclor-1254 on front column due to M6

AR12621O4 Aroclor-1262 on front column due to M6

AR12622O4 Aroclor-1262 on front column due to M6

AR12623O4 Aroclor-1262 on front column due to M6

AR12624O4 Aroclor-1262 on front column due to M6

AR12625O4 Aroclor-1262 on front column due to M6

AR12626O4 Aroclor-1262 on front column due to M6

AR12681O4 Aroclor-1268 on rear column due to M6

AR12682O4 Aroclor-1268 on rear column due to M6

AR12683O4 Aroclor-1268 on rear column due to M6

AR12684O4 Aroclor-1268 on rear column due to M6

AR12685O4 Aroclor-1268 on rear column due to M6

AR12686O4 Aroclor-1268 on rear column due to M6

AR16601O4 Decachlorobiphenyl on front column due to M6

AR16602O4 Decachlorobiphenyl	on front column	due to M6
AR16606O4 Decachlorobiphenyl	on front column	due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____12/3/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-JHW6-181

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2221-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6220F.D/E4H6220R.D

% Moisture: 7.3 Decanted: (Y/N) N Date Received: 11/14/2013

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	350	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	350	U
53469-21-9	Aroclor-1242	350	U
12672-29-6	Aroclor-1248	350	U
11097-69-1	Aroclor-1254	1100	
11096-82-5	Aroclor-1260	350	U
37324-23-5	Aroclor-1262	350	U
11100-14-4	Aroclor-1268	350	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-JHE6-182

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2221-02A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6221F.D/E4H6221R.D

% Moisture: 8.3 Decanted: (Y/N) N Date Received: 11/14/2013

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	360	U
11104-28-2	Aroclor-1221	360	U
11141-16-5	Aroclor-1232	360	U
53469-21-9	Aroclor-1242	360	U
12672-29-6	Aroclor-1248	360	U
11097-69-1	Aroclor-1254	1600	P
11096-82-5	Aroclor-1260	360	U
37324-23-5	Aroclor-1262	360	U
11100-14-4	Aroclor-1268	360	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-IHW6-183

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2221-03A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E4H6222F.D/E4H6222R.D

% Moisture: 7.6 Decanted: (Y/N) N Date Received: 11/14/2013

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	350	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	350	U
53469-21-9	Aroclor-1242	350	U
12672-29-6	Aroclor-1248	350	U
11097-69-1	Aroclor-1254	2500	P
11096-82-5	Aroclor-1260	350	U
37324-23-5	Aroclor-1262	350	U
11100-14-4	Aroclor-1268	350	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-IHE6-184

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2221-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6223F.D/E4H6223R.D

% Moisture: 7.4 Decanted: (Y/N) N Date Received: 11/14/2013

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	710	U
11104-28-2	Aroclor-1221	710	U
11141-16-5	Aroclor-1232	710	U
53469-21-9	Aroclor-1242	710	U
12672-29-6	Aroclor-1248	710	U
11097-69-1	Aroclor-1254	1100	
11096-82-5	Aroclor-1260	710	U
37324-23-5	Aroclor-1262	710	U
11100-14-4	Aroclor-1268	710	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-G-CO MP-185

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2221-05A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6224F.D/E4H6224R.D

% Moisture: 4.6 Decanted: (Y/N) N Date Received: 11/14/2013

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/15/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	690	U
11104-28-2	Aroclor-1221	690	U
11141-16-5	Aroclor-1232	690	U
53469-21-9	Aroclor-1242	690	U
12672-29-6	Aroclor-1248	690	U
11097-69-1	Aroclor-1254	2700	
11096-82-5	Aroclor-1260	690	U
37324-23-5	Aroclor-1262	690	U
11100-14-4	Aroclor-1268	690	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74761

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74761

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6186F.D/E4H6186R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/14/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74761(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74761

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6187F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/14/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74761(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74761

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6187R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/14/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/14/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	130	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74761	70	73	91	97			0
02	LCS-74761	90	93	90	96			0
03	CDE-OU1-NM1-JHW6-181	100	106	107	123			0
04	CDE-OU1-NM1-JHE6-182	106	112	136 D	136 D			2
05	CDE-OU1-NM1-IHW6-183	100	103	128 D	130 D			2
06	CDE-OU1-NM1-IHE6-184	99	107	113	127 D			1
07	CDE-OU1-NM1-G-COMP-185	109	115	142 D	144 D			2

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.11.29.0851

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74761

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Lab Sample ID: LCS-74761 LCS Lot No.:

Date Extracted: 11/14/2013 Date Analyzed (1): 11/14/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	121.6752	91		40-140
Aroclor-1260	133.3330	124.0698	93		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/14/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	131.6883	99		40-140
Aroclor-1260	133.3330	141.6992	106		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.11.29.0851

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74761

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

Lab File ID: E4H6186F.D / E4H6186R.D Lab Sample ID: MB-74761

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/14/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/14/2013 Date Analyzed (2): 11/14/2013

Time Analyzed (1): 15:26 Time Analyzed (2): 15:26

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74761	LCS-74761	11/14/2013	11/14/2013
02	CDE-OU1-NM1-JHW6-181	M2221-01A	11/15/2013	11/15/2013
03	CDE-OU1-NM1-JHE6-182	M2221-02A	11/15/2013	11/15/2013
04	CDE-OU1-NM1-IHW6-183	M2221-03A	11/15/2013	11/15/2013
05	CDE-OU1-NM1-IHE6-184	M2221-04A	11/15/2013	11/15/2013
06	CDE-OU1-NM1-G-COMP-185	M2221-05A	11/15/2013	11/15/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971F.D	11/8/2013	16:35	3.256	9.712
02	AR122160 4	E4H5972F.D	11/8/2013	16:53	3.256	9.711
03	AR122120 4	E4H5973F.D	11/8/2013	17:11	3.257	9.711
04	AR122130 4	E4H5974F.D	11/8/2013	17:29	3.256	9.710
05	AR122140 4	E4H5975F.D	11/8/2013	17:47	3.256	9.711
06	AR122150 4	E4H5976F.D	11/8/2013	18:05	3.256	9.711
07	AR123210 4	E4H5977F.D	11/8/2013	18:23	3.257	9.711
08	AR123260 4	E4H5978F.D	11/8/2013	18:41	3.257	9.711
09	AR123220 4	E4H5979F.D	11/8/2013	18:59	3.256	9.712
10	AR123230 4	E4H5980F.D	11/8/2013	19:17	3.256	9.710
11	AR123240 4	E4H5981F.D	11/8/2013	19:35	3.257	9.710
12	AR123250 4	E4H5982F.D	11/8/2013	19:53	3.256	9.711
13	AR124210 4	E4H5983F.D	11/8/2013	20:11	3.257	9.710
14	AR124260 4	E4H5984F.D	11/8/2013	20:29	3.256	9.711
15	AR124220 4	E4H5985F.D	11/8/2013	20:47	3.257	9.710
16	AR124230 4	E4H5986F.D	11/8/2013	21:05	3.256	9.710
17	AR124240 4	E4H5987F.D	11/8/2013	21:24	3.256	9.710
18	AR124250 4	E4H5988F.D	11/8/2013	21:42	3.257	9.710
19	AR124810 4	E4H5989F.D	11/8/2013	22:00	3.256	9.710
20	AR124860 4	E4H5990F.D	11/8/2013	22:18	3.257	9.709
21	AR124820 4	E4H5991F.D	11/8/2013	22:36	3.256	9.710
22	AR124830 4	E4H5992F.D	11/8/2013	22:54	3.257	9.710
23	AR124840 4	E4H5993F.D	11/8/2013	23:12	3.256	9.711
24	AR124850 4	E4H5994F.D	11/8/2013	23:30	3.257	9.709
25	AR125410 4	E4H5995F.D	11/8/2013	23:48	3.256	9.709
26	AR125460 4	E4H5996F.D	11/9/2013	0:06	3.256	9.711
27	AR125420 4	E4H5997F.D	11/9/2013	0:24	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998F.D	11/9/2013	0:42	3.257	9.710
29	AR125440 4	E4H5999F.D	11/9/2013	1:00	3.256	9.709
30	AR125450 4	E4H6000F.D	11/9/2013	1:18	3.257	9.710
31	AR126210 4	E4H6001F.D	11/9/2013	1:36	3.256	9.709
32	AR126260 4	E4H6002F.D	11/9/2013	1:54	3.256	9.710
33	AR126220 4	E4H6003F.D	11/9/2013	2:13	3.256	9.709
34	AR126230 4	E4H6004F.D	11/9/2013	2:31	3.256	9.710
35	AR126240 4	E4H6005F.D	11/9/2013	2:49	3.257	9.709
36	AR126250 4	E4H6006F.D	11/9/2013	3:07	3.256	9.710
37	AR126810 4	E4H6007F.D	11/9/2013	3:25	3.256	9.710
38	AR126860 4	E4H6008F.D	11/9/2013	3:43	3.256	9.710
39	AR126820 4	E4H6009F.D	11/9/2013	4:01	3.256	9.710
40	AR126830 4	E4H6010F.D	11/9/2013	4:19	3.256	9.711
41	AR126840 4	E4H6011F.D	11/9/2013	4:37	3.256	9.710
42	AR126850 4	E4H6012F.D	11/9/2013	4:55	3.256	9.709
43	AR166010 4	E4H6013F.D	11/9/2013	5:13	3.255	9.710
44	AR166060 4	E4H6014F.D	11/9/2013	5:31	3.256	9.710
45	AR166020 4	E4H6015F.D	11/9/2013	5:49	3.255	9.710
46	AR166030 4	E4H6016F.D	11/9/2013	6:07	3.256	9.709
47	AR166040 4	E4H6017F.D	11/9/2013	6:26	3.256	9.709
48	AR166050 4	E4H6018F.D	11/9/2013	6:44	3.256	9.711
49	AR16603OL	E4H6176F.D	11/14/2013	12:06	3.256	9.710
50	AR12543OL	E4H6177F.D	11/14/2013	12:30	3.259	9.715
51	MB-74761	E4H6186F.D	11/14/2013	15:26	3.254	9.710
52	LCS-74761	E4H6187F.D	11/14/2013	15:44	3.254	9.709
53	AR16603OM	E4H6204F.D	11/14/2013	20:53	3.256	9.709
54	AR12543OM	E4H6205F.D	11/14/2013	21:11	3.255	9.708

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
55	AR12543ON	E4H6213F.D	11/15/2013	9:27	3.261	9.718
56	AR16603ON	E4H6219F.D	11/15/2013	11:25	3.255	9.710
57	CDE-OU1-NM1-JHW6-181	E4H6220F.D	11/15/2013	11:43	3.255	9.708
58	CDE-OU1-NM1-JHE6-182	E4H6221F.D	11/15/2013	12:01	3.254	9.706
59	CDE-OU1-NM1-IHW6-183	E4H6222F.D	11/15/2013	12:19	3.254	9.707
60	CDE-OU1-NM1-IHE6-184	E4H6223F.D	11/15/2013	12:37	3.254	9.708
61	CDE-OU1-NM1-G-COMP-185	E4H6224F.D	11/15/2013	12:55	3.254	9.707
62	AR16603OO	E4H6226F.D	11/15/2013	13:31	3.254	9.707
63	AR12543OO	E4H6227F.D	11/15/2013	13:49	3.255	9.709

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971R.D	11/8/2013	16:35	3.973	12.131
02	AR122160 4	E4H5972R.D	11/8/2013	16:53	3.973	12.129
03	AR122120 4	E4H5973R.D	11/8/2013	17:11	3.973	12.129
04	AR122130 4	E4H5974R.D	11/8/2013	17:29	3.973	12.130
05	AR122140 4	E4H5975R.D	11/8/2013	17:47	3.973	12.127
06	AR122150 4	E4H5976R.D	11/8/2013	18:05	3.972	12.131
07	AR123210 4	E4H5977R.D	11/8/2013	18:23	3.974	12.128
08	AR123260 4	E4H5978R.D	11/8/2013	18:41	3.972	12.126
09	AR123220 4	E4H5979R.D	11/8/2013	18:59	3.973	12.128
10	AR123230 4	E4H5980R.D	11/8/2013	19:17	3.973	12.128
11	AR123240 4	E4H5981R.D	11/8/2013	19:35	3.973	12.130
12	AR123250 4	E4H5982R.D	11/8/2013	19:53	3.973	12.131
13	AR124210 4	E4H5983R.D	11/8/2013	20:11	3.973	12.129
14	AR124260 4	E4H5984R.D	11/8/2013	20:29	3.973	12.126
15	AR124220 4	E4H5985R.D	11/8/2013	20:47	3.973	12.128
16	AR124230 4	E4H5986R.D	11/8/2013	21:05	3.973	12.128
17	AR124240 4	E4H5987R.D	11/8/2013	21:24	3.973	12.128
18	AR124250 4	E4H5988R.D	11/8/2013	21:42	3.974	12.130
19	AR124810 4	E4H5989R.D	11/8/2013	22:00	3.973	12.130
20	AR124860 4	E4H5990R.D	11/8/2013	22:18	3.974	12.130
21	AR124820 4	E4H5991R.D	11/8/2013	22:36	3.973	12.130
22	AR124830 4	E4H5992R.D	11/8/2013	22:54	3.974	12.129
23	AR124840 4	E4H5993R.D	11/8/2013	23:12	3.973	12.129
24	AR124850 4	E4H5994R.D	11/8/2013	23:30	3.974	12.127
25	AR125410 4	E4H5995R.D	11/8/2013	23:48	3.973	12.130
26	AR125460 4	E4H5996R.D	11/9/2013	0:06	3.973	12.131
27	AR125420 4	E4H5997R.D	11/9/2013	0:24	3.974	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998R.D	11/9/2013	0:42	3.974	12.131
29	AR125440 4	E4H5999R.D	11/9/2013	1:00	3.973	12.128
30	AR125450 4	E4H6000R.D	11/9/2013	1:18	3.973	12.132
31	AR126210 4	E4H6001R.D	11/9/2013	1:36	3.974	12.132
32	AR126260 4	E4H6002R.D	11/9/2013	1:54	3.973	12.132
33	AR126220 4	E4H6003R.D	11/9/2013	2:13	3.972	12.128
34	AR126230 4	E4H6004R.D	11/9/2013	2:31	3.972	12.129
35	AR126240 4	E4H6005R.D	11/9/2013	2:49	3.974	12.129
36	AR126250 4	E4H6006R.D	11/9/2013	3:07	3.973	12.130
37	AR126810 4	E4H6007R.D	11/9/2013	3:25	3.973	12.130
38	AR126860 4	E4H6008R.D	11/9/2013	3:43	3.973	12.127
39	AR126820 4	E4H6009R.D	11/9/2013	4:01	3.974	12.128
40	AR126830 4	E4H6010R.D	11/9/2013	4:19	3.972	12.129
41	AR126840 4	E4H6011R.D	11/9/2013	4:37	3.972	12.128
42	AR126850 4	E4H6012R.D	11/9/2013	4:55	3.973	12.129
43	AR166010 4	E4H6013R.D	11/9/2013	5:13	3.973	12.126
44	AR166060 4	E4H6014R.D	11/9/2013	5:31	3.973	12.131
45	AR166020 4	E4H6015R.D	11/9/2013	5:49	3.971	12.131
46	AR166030 4	E4H6016R.D	11/9/2013	6:07	3.972	12.129
47	AR166040 4	E4H6017R.D	11/9/2013	6:26	3.973	12.129
48	AR166050 4	E4H6018R.D	11/9/2013	6:44	3.972	12.129
49	AR16603OL	E4H6176R.D	11/14/2013	12:06	3.971	12.131
50	AR12543OL	E4H6177R.D	11/14/2013	12:30	3.970	12.128
51	MB-74761	E4H6186R.D	11/14/2013	15:26	3.970	12.124
52	LCS-74761	E4H6187R.D	11/14/2013	15:44	3.971	12.125
53	AR16603OM	E4H6204R.D	11/14/2013	20:53	3.973	12.127
54	AR12543OM	E4H6205R.D	11/14/2013	21:11	3.972	12.128

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2221 Mod. Ref No.: SDG No.: SM2221

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
55	AR125430N	E4H6213R.D	11/15/2013	9:27	3.969	12.129
56	AR166030N	E4H6219R.D	11/15/2013	11:25	3.970	12.128
57	CDE-OU1-NM1-JHW6-181	E4H6220R.D	11/15/2013	11:43	3.971	12.127
58	CDE-OU1-NM1-JHE6-182	E4H6221R.D	11/15/2013	12:01	3.971	12.125
59	CDE-OU1-NM1-IHW6-183	E4H6222R.D	11/15/2013	12:19	3.970	12.127
60	CDE-OU1-NM1-IHE6-184	E4H6223R.D	11/15/2013	12:37	3.971	12.128
61	CDE-OU1-NM1-G-COMP-185	E4H6224R.D	11/15/2013	12:55	3.970	12.127
62	AR166030O	E4H6226R.D	11/15/2013	13:31	3.971	12.127
63	AR125430O	E4H6227R.D	11/15/2013	13:49	3.971	12.126

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-13-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

Applicable QC Checklist

QC Inspector Name and Signature

Davis Rauer JR

DR

Date

11-13-13

Chemical Parameter Measurement Problems: None

Contingency Sampling: ~~Secondary~~ (QA) N/A

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-13-13

Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-13-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

Davis Rauter

Date

11-13-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-13-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver JR	[signature]	11-13-13
CQC Systems Manager	William Zambrana	[signature]	11-13-13

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2018 -

11-13-13 OU1 New Market ROW
PCB Soil Sampling
Weather, Sunny, Clear 35°
1000 Collecting Samples As Per
Diego Garcia EPA/RPM, Hedge Row
of I and J NMI.

Collected the Following Samples

DATE/TIME		Sample Code COS-OU1
11/13	1030	NMI-JHWG-181
11/13	1040	NMI-JHEG-182
11/13	1050	NMI-IHWG-183
11/13	1100	NMI-IHEG-184
11/13	1115	NMI-G-Comp-185

Area J Approx. 32' Side Walk
to Driveway, Samples Collected
in Area J NMI Hedge Row on
8' centers, 8' From Private
Sidewalk moving West, 8' From
Driveway moving East.
Area I Approx 40'. Samples Collected on
10' Centers. From Driveway East 10'.
Property line West 10'.
- Map pg 73. G-Comp Sample Collected
~~All Sample~~ As Per Diego Garcia
AREA is 5x7', obstructed by roots/Tree.
Composite Collected of this Area →

(94) OLD NEW MARKET Right Way
PCB Soil Sampling

11-13-13

at Maximum 6" depth (Area G-NM1)
Samples, ~~Shipped and~~ Packed and
Shipped For 24Hr Turnaround, to
Mitkem Labs.

11-13-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 24HR
TAT- Indicate Date Needed: ~~2DAY~~
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI / DAVIS RAVER JR

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	CDE-OU1- Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBs +1262, 1268	Temp Blank							
	NM1-JHW6-181	11-13-13	1030	G	SO		1			X								
	NM1-JHE6-182	11-13-13	1040	G	SO		1			X								
	NM1-IHW6-183	11-13-13	1050	G	SO		1			X								
	NM1-IHE6-184	11-13-13	1100	G	SO		1			X								
	NM1-G-Comp-185	11-13-13	1115	G	SO		1			X								
	~~NM1~~ Temp Blank										X							

Relinquished by:	Received by:	Date:	Time:	Temp°C
Davis Raver	EedEx	11-13-13	1700	

☐ EDD Format
☐ E-mail to

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Davis Raver
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

Ship Date: 13NOV13
ActWgt: 25.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

THU - 14 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7971 5034 7050
0201

ED NCOA

02852
RI-US
PVD

51AG1/DSEB/1A0E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a copy of this label for shipping purposes is fraudulent and could result in additional billing charges, [illegible] the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Davis Raver
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797150347050
Ship date: 11/13/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

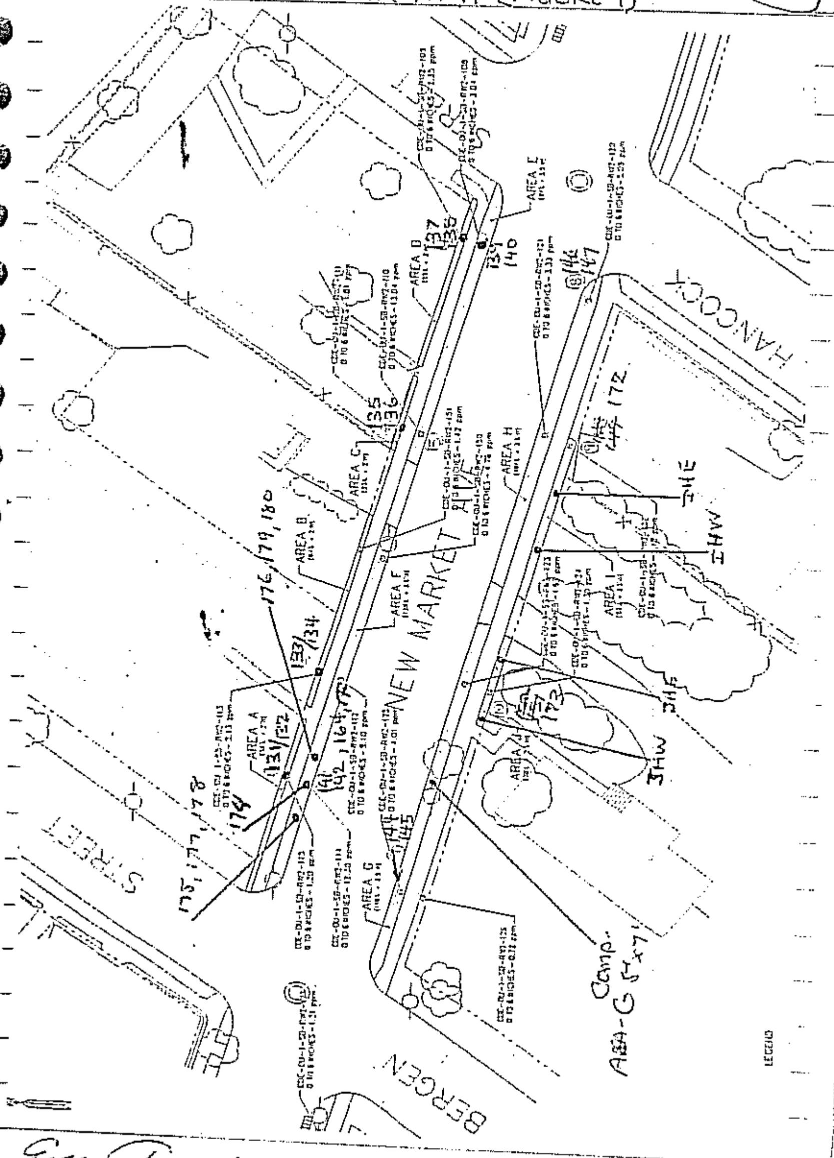
Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

OU1 NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)



[signature] 10/21/13

Rite in the Rain

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/20/2013

TRANSMITTAL NO.: 01450A-492

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
73	Info Sample NM1#187 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #187 failed criteria for PCB's at 1.80 ppm
The criteria is >1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
11-Dec-13 15:25

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Davis Raver

Work Order: M2262
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2262-01	CDE-OU1-NM1-H-COMP-187	Soil	18-Nov-13 13:15	19-Nov-13 10:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2262

M2262

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 11/20/13
Fax Due: 11/20/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2262-01A	CDE-OU1-NM1-H-COMP-187	11/18/2013 13:15	11/19/2013	Soil	PMoist	/					B2
M2262-01A	CDE-OU1-NM1-H-COMP-187	11/18/2013 13:15	11/19/2013	Soil	SW8082_S	/ + AR1262,1268				Y	B2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/20/2013 13:30

Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2262

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-H-COMP-187 (M2262-01A) : Dilution Factor: 5

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AR12216O4 Aroclor-1221 on front column , Tetrachloro-m-xylene on front column due to M6

AR12321O4 Aroclor-1232 on front column due to M6

AR12322O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12324O4 Aroclor-1232 on front column due to M6

AR12325O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12421O4 Aroclor-1242 on front column due to M6

AR12422O4 Aroclor-1242 on front column due to M6

AR12423O4 Aroclor-1242 on front column due to M6

AR12424O4 Aroclor-1242 on front column due to M6

AR12425O4 Aroclor-1242 on front column due to M6

AR12543O4 Aroclor-1254 on front column due to M6

AR12621O4 Aroclor-1262 on front column due to M6

AR12622O4 Aroclor-1262 on front column due to M6

AR12623O4 Aroclor-1262 on front column due to M6

AR12624O4 Aroclor-1262 on front column due to M6

AR12625O4 Aroclor-1262 on front column due to M6

AR12626O4 Aroclor-1262 on front column due to M6

AR12681O4 Aroclor-1268 on rear column due to M6

AR12682O4 Aroclor-1268 on rear column due to M6

AR12683O4 Aroclor-1268 on rear column due to M6

AR12684O4 Aroclor-1268 on rear column due to M6

AR12685O4 Aroclor-1268 on rear column due to M6

AR12686O4 Aroclor-1268 on rear column due to M6

AR16601O4 Decachlorobiphenyl on front column due to M6

AR16602O4 Decachlorobiphenyl on front column due to M6

AR16606O4 Decachlorobiphenyl on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____12/11/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-H-COMP-

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2262-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6279F.D/E4H6279R.D

% Moisture: 7.4 Decanted: (Y/N) N Date Received: 11/19/2013

Extraction: (Type) SONC Date Extracted: 11/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	1800	
11096-82-5	Aroclor-1260	180	U
37324-23-5	Aroclor-1262	180	U
11100-14-4	Aroclor-1268	180	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74859

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6276F.D/E4H6276R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74859(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74859

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6277F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	120	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74859(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74859

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6277R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/19/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	130	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	150	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74859	84	92	79	90			0
02	LCS-74859	88	96	93	107			0
03	CDE-OU1-NM1-H-COMP-	88	96	93	101			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.12.05.06.1059

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-74859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

Lab Sample ID: LCS-74859 LCS Lot No.:

Date Extracted: 11/19/2013 Date Analyzed (1): 11/19/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	119.9205	90		40-140
Aroclor-1260	133.3330	124.8285	94		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/19/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	133.4414	100		40-140
Aroclor-1260	133.3330	149.6362	112		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.12.05.06.1059

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74859

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

Lab File ID: E4H6276F.D / E4H6276R.D Lab Sample ID: MB-74859

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/19/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/19/2013 Date Analyzed (2): 11/19/2013

Time Analyzed (1): 15:06 Time Analyzed (2): 15:06

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74859	LCS-74859	11/19/2013	11/19/2013
02	CDE-OU1-NM1-H-COMP-	M2262-01A	11/19/2013	11/19/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971F.D	11/8/2013	16:35	3.256	9.712
02	AR122160 4	E4H5972F.D	11/8/2013	16:53	3.256	9.711
03	AR122120 4	E4H5973F.D	11/8/2013	17:11	3.257	9.711
04	AR122130 4	E4H5974F.D	11/8/2013	17:29	3.256	9.710
05	AR122140 4	E4H5975F.D	11/8/2013	17:47	3.256	9.711
06	AR122150 4	E4H5976F.D	11/8/2013	18:05	3.256	9.711
07	AR123210 4	E4H5977F.D	11/8/2013	18:23	3.257	9.711
08	AR123260 4	E4H5978F.D	11/8/2013	18:41	3.257	9.711
09	AR123220 4	E4H5979F.D	11/8/2013	18:59	3.256	9.712
10	AR123230 4	E4H5980F.D	11/8/2013	19:17	3.256	9.710
11	AR123240 4	E4H5981F.D	11/8/2013	19:35	3.257	9.710
12	AR123250 4	E4H5982F.D	11/8/2013	19:53	3.256	9.711
13	AR124210 4	E4H5983F.D	11/8/2013	20:11	3.257	9.710
14	AR124260 4	E4H5984F.D	11/8/2013	20:29	3.256	9.711
15	AR124220 4	E4H5985F.D	11/8/2013	20:47	3.257	9.710
16	AR124230 4	E4H5986F.D	11/8/2013	21:05	3.256	9.710
17	AR124240 4	E4H5987F.D	11/8/2013	21:24	3.256	9.710
18	AR124250 4	E4H5988F.D	11/8/2013	21:42	3.257	9.710
19	AR124810 4	E4H5989F.D	11/8/2013	22:00	3.256	9.710
20	AR124860 4	E4H5990F.D	11/8/2013	22:18	3.257	9.709
21	AR124820 4	E4H5991F.D	11/8/2013	22:36	3.256	9.710
22	AR124830 4	E4H5992F.D	11/8/2013	22:54	3.257	9.710
23	AR124840 4	E4H5993F.D	11/8/2013	23:12	3.256	9.711
24	AR124850 4	E4H5994F.D	11/8/2013	23:30	3.257	9.709
25	AR125410 4	E4H5995F.D	11/8/2013	23:48	3.256	9.709
26	AR125460 4	E4H5996F.D	11/9/2013	0:06	3.256	9.711
27	AR125420 4	E4H5997F.D	11/9/2013	0:24	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998F.D	11/9/2013	0:42	3.257	9.710
29	AR125440 4	E4H5999F.D	11/9/2013	1:00	3.256	9.709
30	AR125450 4	E4H6000F.D	11/9/2013	1:18	3.257	9.710
31	AR126210 4	E4H6001F.D	11/9/2013	1:36	3.256	9.709
32	AR126260 4	E4H6002F.D	11/9/2013	1:54	3.256	9.710
33	AR126220 4	E4H6003F.D	11/9/2013	2:13	3.256	9.709
34	AR126230 4	E4H6004F.D	11/9/2013	2:31	3.256	9.710
35	AR126240 4	E4H6005F.D	11/9/2013	2:49	3.257	9.709
36	AR126250 4	E4H6006F.D	11/9/2013	3:07	3.256	9.710
37	AR126810 4	E4H6007F.D	11/9/2013	3:25	3.256	9.710
38	AR126860 4	E4H6008F.D	11/9/2013	3:43	3.256	9.710
39	AR126820 4	E4H6009F.D	11/9/2013	4:01	3.256	9.710
40	AR126830 4	E4H6010F.D	11/9/2013	4:19	3.256	9.711
41	AR126840 4	E4H6011F.D	11/9/2013	4:37	3.256	9.710
42	AR126850 4	E4H6012F.D	11/9/2013	4:55	3.256	9.709
43	AR166010 4	E4H6013F.D	11/9/2013	5:13	3.255	9.710
44	AR166060 4	E4H6014F.D	11/9/2013	5:31	3.256	9.710
45	AR166020 4	E4H6015F.D	11/9/2013	5:49	3.255	9.710
46	AR166030 4	E4H6016F.D	11/9/2013	6:07	3.256	9.709
47	AR166040 4	E4H6017F.D	11/9/2013	6:26	3.256	9.709
48	AR166050 4	E4H6018F.D	11/9/2013	6:44	3.256	9.711
49	AR166030S	E4H6270F.D	11/19/2013	13:17	3.255	9.710
50	AR125430S	E4H6271F.D	11/19/2013	13:35	3.255	9.708
51	MB-74859	E4H6276F.D	11/19/2013	15:06	3.256	9.708
52	LCS-74859	E4H6277F.D	11/19/2013	15:24	3.256	9.708
53	CDE-OU1-NM1-H-COMP-	E4H6279F.D	11/19/2013	16:08	3.260	9.713

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	AR16603OT	E4H6281F.D	11/19/2013	16:44	3.255	9.709
55	AR12543OT	E4H6282F.D	11/19/2013	17:02	3.255	9.709

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110O4	E4H5971R.D	11/8/2013	16:35	3.973	12.131
02	AR122160O4	E4H5972R.D	11/8/2013	16:53	3.973	12.129
03	AR122120O4	E4H5973R.D	11/8/2013	17:11	3.973	12.129
04	AR122130O4	E4H5974R.D	11/8/2013	17:29	3.973	12.130
05	AR122140O4	E4H5975R.D	11/8/2013	17:47	3.973	12.127
06	AR122150O4	E4H5976R.D	11/8/2013	18:05	3.972	12.131
07	AR123210O4	E4H5977R.D	11/8/2013	18:23	3.974	12.128
08	AR123260O4	E4H5978R.D	11/8/2013	18:41	3.972	12.126
09	AR123220O4	E4H5979R.D	11/8/2013	18:59	3.973	12.128
10	AR123230O4	E4H5980R.D	11/8/2013	19:17	3.973	12.128
11	AR123240O4	E4H5981R.D	11/8/2013	19:35	3.973	12.130
12	AR123250O4	E4H5982R.D	11/8/2013	19:53	3.973	12.131
13	AR124210O4	E4H5983R.D	11/8/2013	20:11	3.973	12.129
14	AR124260O4	E4H5984R.D	11/8/2013	20:29	3.973	12.126
15	AR124220O4	E4H5985R.D	11/8/2013	20:47	3.973	12.128
16	AR124230O4	E4H5986R.D	11/8/2013	21:05	3.973	12.128
17	AR124240O4	E4H5987R.D	11/8/2013	21:24	3.973	12.128
18	AR124250O4	E4H5988R.D	11/8/2013	21:42	3.974	12.130
19	AR124810O4	E4H5989R.D	11/8/2013	22:00	3.973	12.130
20	AR124860O4	E4H5990R.D	11/8/2013	22:18	3.974	12.130
21	AR124820O4	E4H5991R.D	11/8/2013	22:36	3.973	12.130
22	AR124830O4	E4H5992R.D	11/8/2013	22:54	3.974	12.129
23	AR124840O4	E4H5993R.D	11/8/2013	23:12	3.973	12.129
24	AR124850O4	E4H5994R.D	11/8/2013	23:30	3.974	12.127
25	AR125410O4	E4H5995R.D	11/8/2013	23:48	3.973	12.130
26	AR125460O4	E4H5996R.D	11/9/2013	0:06	3.973	12.131
27	AR125420O4	E4H5997R.D	11/9/2013	0:24	3.974	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998R.D	11/9/2013	0:42	3.974	12.131
29	AR125440 4	E4H5999R.D	11/9/2013	1:00	3.973	12.128
30	AR125450 4	E4H6000R.D	11/9/2013	1:18	3.973	12.132
31	AR126210 4	E4H6001R.D	11/9/2013	1:36	3.974	12.132
32	AR126260 4	E4H6002R.D	11/9/2013	1:54	3.973	12.132
33	AR126220 4	E4H6003R.D	11/9/2013	2:13	3.972	12.128
34	AR126230 4	E4H6004R.D	11/9/2013	2:31	3.972	12.129
35	AR126240 4	E4H6005R.D	11/9/2013	2:49	3.974	12.129
36	AR126250 4	E4H6006R.D	11/9/2013	3:07	3.973	12.130
37	AR126810 4	E4H6007R.D	11/9/2013	3:25	3.973	12.130
38	AR126860 4	E4H6008R.D	11/9/2013	3:43	3.973	12.127
39	AR126820 4	E4H6009R.D	11/9/2013	4:01	3.974	12.128
40	AR126830 4	E4H6010R.D	11/9/2013	4:19	3.972	12.129
41	AR126840 4	E4H6011R.D	11/9/2013	4:37	3.972	12.128
42	AR126850 4	E4H6012R.D	11/9/2013	4:55	3.973	12.129
43	AR166010 4	E4H6013R.D	11/9/2013	5:13	3.973	12.126
44	AR166060 4	E4H6014R.D	11/9/2013	5:31	3.973	12.131
45	AR166020 4	E4H6015R.D	11/9/2013	5:49	3.971	12.131
46	AR166030 4	E4H6016R.D	11/9/2013	6:07	3.972	12.129
47	AR166040 4	E4H6017R.D	11/9/2013	6:26	3.973	12.129
48	AR166050 4	E4H6018R.D	11/9/2013	6:44	3.972	12.129
49	AR166030S	E4H6270R.D	11/19/2013	13:17	3.970	12.127
50	AR125430S	E4H6271R.D	11/19/2013	13:35	3.972	12.126
51	MB-74859	E4H6276R.D	11/19/2013	15:06	3.972	12.125
52	LCS-74859	E4H6277R.D	11/19/2013	15:24	3.973	12.127
53	CDE-OU1-NM1-H-COMP-	E4H6279R.D	11/19/2013	16:08	3.969	12.126

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2262 Mod. Ref No.: SDG No.: SM2262

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	AR16603OT	E4H6281R.D	11/19/2013	16:44	3.971	12.125
55	AR12543OT	E4H6282R.D	11/19/2013	17:02	3.972	12.127

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-18-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments Applicable QC Checklist

QC Inspector Name and Signature

Davis Rivas

DR

Date

11-18-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11-18-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Clear 64°

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Sample Area NIII - Area H - comp

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments:
Samples Shipped to Mitkem LAB via Fedex overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: N/A

Non-conformance Problems: None

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-18-13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-18-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? Scanned/Emailed	X			

Notes/Comments

_____

_____

_____

QC Inspector Name and Signature

_____

_____

Date

_____

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-19-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	Davis Raver	[signature]	11-18-13
CQC Systems Manager	William Zambrano	[signature]	11-18-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling: 24HR

TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME

P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI / DAVIS RAUER

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Containers: TOTAL PCBs + 1262, 1268	Analyses: Temp Blank							
	CDE-OU1- NM1-H-comp-187	11-18-13	1315	G	SO		1			X								
	Temp Blank										X							

Relinquished by:	Received by:	Date:	Time:	Temp °C
DAVIS RAUER / [illegible]	FED EX	11-18-13	1700	

☐ EDD Format
☐ E-mail to KLickfield@Sevenson.com
DRauer@Sevenson.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Daviz Raver
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx. Express

J1330100290326

Ship Date: 18NOV13
ActWgt: 15.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Comell
Dept #

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

TUE - 19 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7971 8270 3275

ED NCOA

02852
RI-US
PVD

51AG1/CSEG/1A0E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Davis Raver
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797182703275
Ship date: 11/18/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 15 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DWI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

(26) OU1 NEW MARKET RIGHT OF WAY
PCB Soil Sampling
11-18-13
Weather Clear 64°
1315
Collect Sample NM1-H (AREA H)
As Per Diego Garcia collect
Composite Sample of Area H
Around Root base.
Sample ID #
* See map Pg 73
* CDE-OU1-NM1-H-comp-187

DATE/TIME	Sample Code	MitKem #	Results
11/18 1315	CDE-OU1-NM1-H-comp-187		

Sample ~~Stipped~~ Packed and shipped to Mitkem.

11-18-13

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

73

10/21/13

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/20/2013

TRANSMITTAL NO.: 01450A-493

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
74	Final Sample NM1#177, 186 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS
Sample #177 passed criteria for PCB's at 0.510 ppm,
Sample #186 passed criteria for PCB's at 0.350 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Report Date:
09-Dec-13 15:59

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Davis Raver

Work Order: M2253
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2253-01	CDE-OU1-NM1-FW18-177	Soil	12-Nov-13 09:15	16-Nov-13 09:34
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
M2253-03	CDE-OU1-NM1-F36-186	Soil	15-Nov-13 13:20	16-Nov-13 09:34

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2253

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 12/05/13
Fax Due: 11/20/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2253-01A	CDE-OU1-NM1-FW18-177	11/12/2013 09:15	11/16/2013	Soil	PMoist	/					D3
M2253-01A	CDE-OU1-NM1-FW18-177	11/12/2013 09:15	11/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2253-02A	CDE-OU1-NM1-FE18-179	11/12/2013 10:35	11/16/2013	Soil	PMoist	/					D3
M2253-02A	CDE-OU1-NM1-FE18-179	11/12/2013 10:35	11/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3
M2253-03A	CDE-OU1-NM1-F36-186	11/15/2013 13:20	11/16/2013	Soil	PMoist	/					D3
M2253-03A	CDE-OU1-NM1-F36-186	11/15/2013 13:20	11/16/2013	Soil	SW8082_S	/ + AR1262,1268				Y	D3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/18/2013 11:43 Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2253

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-FW18-177 (M2253-01A) : Dilution Factor: 2
CDE-OU1-NM1-FE18-179 (M2253-02A) : Dilution Factor: 5

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AR12216O4 Aroclor-1221 on front column , Tetrachloro-m-xylene on front column due to M6

AR12321O4 Aroclor-1232 on front column due to M6

AR12322O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12324O4 Aroclor-1232 on front column due to M6

AR12325O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12421O4 Aroclor-1242 on front column due to M6

AR12422O4 Aroclor-1242 on front column due to M6

AR12423O4 Aroclor-1242 on front column due to M6

AR12424O4 Aroclor-1242 on front column due to M6

AR12425O4 Aroclor-1242 on front column due to M6

AR12543O4 Aroclor-1254 on front column due to M6

AR12621O4 Aroclor-1262 on front column due to M6

AR12622O4 Aroclor-1262 on front column due to M6

AR12623O4	Aroclor-1262	on front column	due to M6
AR12624O4	Aroclor-1262	on front column	due to M6
AR12625O4	Aroclor-1262	on front column	due to M6
AR12626O4	Aroclor-1262	on front column	due to M6
AR12681O4	Aroclor-1268	on rear column	due to M6
AR12682O4	Aroclor-1268	on rear column	due to M6
AR12683O4	Aroclor-1268	on rear column	due to M6
AR12684O4	Aroclor-1268	on rear column	due to M6
AR12685O4	Aroclor-1268	on rear column	due to M6
AR12686O4	Aroclor-1268	on rear column	due to M6
AR16601O4	Decachlorobiphenyl	on front column	due to M6
AR16602O4	Decachlorobiphenyl	on front column	due to M6
AR16606O4	Decachlorobiphenyl	on front column	due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____12/9/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FW18-17

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2253-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6267F.D/E4H6267R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 11/16/2013

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	76	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	76	U
53469-21-9	Aroclor-1242	76	U
12672-29-6	Aroclor-1248	76	U
11097-69-1	Aroclor-1254	510	
11096-82-5	Aroclor-1260	76	U
37324-23-5	Aroclor-1262	76	U
11100-14-4	Aroclor-1268	76	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FE18-17

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2253-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H6268F.D/E4H6268R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 11/16/2013

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	1000	
11096-82-5	Aroclor-1260	190	U
37324-23-5	Aroclor-1262	190	U
11100-14-4	Aroclor-1268	190	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-F36-186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2253-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6266F.D/E4H6266R.D

% Moisture: 17 Decanted: (Y/N) N Date Received: 11/16/2013

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	350	
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74821

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74821

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6262F.D/E4H6262R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74821(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74821

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6263F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74821(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74821

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6263R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/18/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/19/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	130	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74821	87	94	85	101			0
02	LCS-74821	82	89	80	93			0
03	CDE-OU1-NM1-F36-186	78	80	63	72			0
04	CDE-OU1-NM1-FW18-17	80	87	69	83			0
05	CDE-OU1-NM1-FE18-17	90	102	92	110			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.12.05.06.1059

Page 1 of 1 SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74821

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Lab Sample ID: LCS-74821 LCS Lot No.:

Date Extracted: 11/18/2013 Date Analyzed (1): 11/19/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	112.9172	85		40-140
Aroclor-1260	133.3330	114.2553	86		60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/19/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC	#	QC LIMITS
Aroclor-1016	133.3330	127.8190	96		40-140
Aroclor-1260	133.3330	139.2877	104		60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.12.05.06.1059

SW846

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-74821

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

Lab File ID: E4H6262F.D / E4H6262R.D Lab Sample ID: MB-74821

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/18/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/19/2013 Date Analyzed (2): 11/19/2013

Time Analyzed (1): 10:53 Time Analyzed (2): 10:53

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74821	LCS-74821	11/19/2013	11/19/2013
02	CDE-OU1-NM1-F36-186	M2253-03A	11/19/2013	11/19/2013
03	CDE-OU1-NM1-FW18-17	M2253-01A	11/19/2013	11/19/2013
04	CDE-OU1-NM1-FE18-17	M2253-02A	11/19/2013	11/19/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971F.D	11/8/2013	16:35	3.256	9.712
02	AR122160 4	E4H5972F.D	11/8/2013	16:53	3.256	9.711
03	AR122120 4	E4H5973F.D	11/8/2013	17:11	3.257	9.711
04	AR122130 4	E4H5974F.D	11/8/2013	17:29	3.256	9.710
05	AR122140 4	E4H5975F.D	11/8/2013	17:47	3.256	9.711
06	AR122150 4	E4H5976F.D	11/8/2013	18:05	3.256	9.711
07	AR123210 4	E4H5977F.D	11/8/2013	18:23	3.257	9.711
08	AR123260 4	E4H5978F.D	11/8/2013	18:41	3.257	9.711
09	AR123220 4	E4H5979F.D	11/8/2013	18:59	3.256	9.712
10	AR123230 4	E4H5980F.D	11/8/2013	19:17	3.256	9.710
11	AR123240 4	E4H5981F.D	11/8/2013	19:35	3.257	9.710
12	AR123250 4	E4H5982F.D	11/8/2013	19:53	3.256	9.711
13	AR124210 4	E4H5983F.D	11/8/2013	20:11	3.257	9.710
14	AR124260 4	E4H5984F.D	11/8/2013	20:29	3.256	9.711
15	AR124220 4	E4H5985F.D	11/8/2013	20:47	3.257	9.710
16	AR124230 4	E4H5986F.D	11/8/2013	21:05	3.256	9.710
17	AR124240 4	E4H5987F.D	11/8/2013	21:24	3.256	9.710
18	AR124250 4	E4H5988F.D	11/8/2013	21:42	3.257	9.710
19	AR124810 4	E4H5989F.D	11/8/2013	22:00	3.256	9.710
20	AR124860 4	E4H5990F.D	11/8/2013	22:18	3.257	9.709
21	AR124820 4	E4H5991F.D	11/8/2013	22:36	3.256	9.710
22	AR124830 4	E4H5992F.D	11/8/2013	22:54	3.257	9.710
23	AR124840 4	E4H5993F.D	11/8/2013	23:12	3.256	9.711
24	AR124850 4	E4H5994F.D	11/8/2013	23:30	3.257	9.709
25	AR125410 4	E4H5995F.D	11/8/2013	23:48	3.256	9.709
26	AR125460 4	E4H5996F.D	11/9/2013	0:06	3.256	9.711
27	AR125420 4	E4H5997F.D	11/9/2013	0:24	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998F.D	11/9/2013	0:42	3.257	9.710
29	AR125440 4	E4H5999F.D	11/9/2013	1:00	3.256	9.709
30	AR125450 4	E4H6000F.D	11/9/2013	1:18	3.257	9.710
31	AR126210 4	E4H6001F.D	11/9/2013	1:36	3.256	9.709
32	AR126260 4	E4H6002F.D	11/9/2013	1:54	3.256	9.710
33	AR126220 4	E4H6003F.D	11/9/2013	2:13	3.256	9.709
34	AR126230 4	E4H6004F.D	11/9/2013	2:31	3.256	9.710
35	AR126240 4	E4H6005F.D	11/9/2013	2:49	3.257	9.709
36	AR126250 4	E4H6006F.D	11/9/2013	3:07	3.256	9.710
37	AR126810 4	E4H6007F.D	11/9/2013	3:25	3.256	9.710
38	AR126860 4	E4H6008F.D	11/9/2013	3:43	3.256	9.710
39	AR126820 4	E4H6009F.D	11/9/2013	4:01	3.256	9.710
40	AR126830 4	E4H6010F.D	11/9/2013	4:19	3.256	9.711
41	AR126840 4	E4H6011F.D	11/9/2013	4:37	3.256	9.710
42	AR126850 4	E4H6012F.D	11/9/2013	4:55	3.256	9.709
43	AR166010 4	E4H6013F.D	11/9/2013	5:13	3.255	9.710
44	AR166060 4	E4H6014F.D	11/9/2013	5:31	3.256	9.710
45	AR166020 4	E4H6015F.D	11/9/2013	5:49	3.255	9.710
46	AR166030 4	E4H6016F.D	11/9/2013	6:07	3.256	9.709
47	AR166040 4	E4H6017F.D	11/9/2013	6:26	3.256	9.709
48	AR166050 4	E4H6018F.D	11/9/2013	6:44	3.256	9.711
49	AR16603OR	E4H6256F.D	11/19/2013	8:43	3.256	9.710
50	AR12543OR	E4H6257F.D	11/19/2013	9:01	3.257	9.710
51	MB-74821	E4H6262F.D	11/19/2013	10:53	3.258	9.710
52	LCS-74821	E4H6263F.D	11/19/2013	11:11	3.258	9.709
53	CDE-OU1-NM1-F36-186	E4H6266F.D	11/19/2013	12:06	3.256	9.709

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-FW18-17	E4H6267F.D	11/19/2013	12:23	3.255	9.709
55	CDE-OU1-NM1-FE18-17	E4H6268F.D	11/19/2013	12:41	3.255	9.708
56	AR166030S	E4H6270F.D	11/19/2013	13:17	3.255	9.710
57	AR125430S	E4H6271F.D	11/19/2013	13:35	3.255	9.708

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971R.D	11/8/2013	16:35	3.973	12.131
02	AR122160 4	E4H5972R.D	11/8/2013	16:53	3.973	12.129
03	AR122120 4	E4H5973R.D	11/8/2013	17:11	3.973	12.129
04	AR122130 4	E4H5974R.D	11/8/2013	17:29	3.973	12.130
05	AR122140 4	E4H5975R.D	11/8/2013	17:47	3.973	12.127
06	AR122150 4	E4H5976R.D	11/8/2013	18:05	3.972	12.131
07	AR123210 4	E4H5977R.D	11/8/2013	18:23	3.974	12.128
08	AR123260 4	E4H5978R.D	11/8/2013	18:41	3.972	12.126
09	AR123220 4	E4H5979R.D	11/8/2013	18:59	3.973	12.128
10	AR123230 4	E4H5980R.D	11/8/2013	19:17	3.973	12.128
11	AR123240 4	E4H5981R.D	11/8/2013	19:35	3.973	12.130
12	AR123250 4	E4H5982R.D	11/8/2013	19:53	3.973	12.131
13	AR124210 4	E4H5983R.D	11/8/2013	20:11	3.973	12.129
14	AR124260 4	E4H5984R.D	11/8/2013	20:29	3.973	12.126
15	AR124220 4	E4H5985R.D	11/8/2013	20:47	3.973	12.128
16	AR124230 4	E4H5986R.D	11/8/2013	21:05	3.973	12.128
17	AR124240 4	E4H5987R.D	11/8/2013	21:24	3.973	12.128
18	AR124250 4	E4H5988R.D	11/8/2013	21:42	3.974	12.130
19	AR124810 4	E4H5989R.D	11/8/2013	22:00	3.973	12.130
20	AR124860 4	E4H5990R.D	11/8/2013	22:18	3.974	12.130
21	AR124820 4	E4H5991R.D	11/8/2013	22:36	3.973	12.130
22	AR124830 4	E4H5992R.D	11/8/2013	22:54	3.974	12.129
23	AR124840 4	E4H5993R.D	11/8/2013	23:12	3.973	12.129
24	AR124850 4	E4H5994R.D	11/8/2013	23:30	3.974	12.127
25	AR125410 4	E4H5995R.D	11/8/2013	23:48	3.973	12.130
26	AR125460 4	E4H5996R.D	11/9/2013	0:06	3.973	12.131
27	AR125420 4	E4H5997R.D	11/9/2013	0:24	3.974	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998R.D	11/9/2013	0:42	3.974	12.131
29	AR125440 4	E4H5999R.D	11/9/2013	1:00	3.973	12.128
30	AR125450 4	E4H6000R.D	11/9/2013	1:18	3.973	12.132
31	AR126210 4	E4H6001R.D	11/9/2013	1:36	3.974	12.132
32	AR126260 4	E4H6002R.D	11/9/2013	1:54	3.973	12.132
33	AR126220 4	E4H6003R.D	11/9/2013	2:13	3.972	12.128
34	AR126230 4	E4H6004R.D	11/9/2013	2:31	3.972	12.129
35	AR126240 4	E4H6005R.D	11/9/2013	2:49	3.974	12.129
36	AR126250 4	E4H6006R.D	11/9/2013	3:07	3.973	12.130
37	AR126810 4	E4H6007R.D	11/9/2013	3:25	3.973	12.130
38	AR126860 4	E4H6008R.D	11/9/2013	3:43	3.973	12.127
39	AR126820 4	E4H6009R.D	11/9/2013	4:01	3.974	12.128
40	AR126830 4	E4H6010R.D	11/9/2013	4:19	3.972	12.129
41	AR126840 4	E4H6011R.D	11/9/2013	4:37	3.972	12.128
42	AR126850 4	E4H6012R.D	11/9/2013	4:55	3.973	12.129
43	AR166010 4	E4H6013R.D	11/9/2013	5:13	3.973	12.126
44	AR166060 4	E4H6014R.D	11/9/2013	5:31	3.973	12.131
45	AR166020 4	E4H6015R.D	11/9/2013	5:49	3.971	12.131
46	AR166030 4	E4H6016R.D	11/9/2013	6:07	3.972	12.129
47	AR166040 4	E4H6017R.D	11/9/2013	6:26	3.973	12.129
48	AR166050 4	E4H6018R.D	11/9/2013	6:44	3.972	12.129
49	AR16603OR	E4H6256R.D	11/19/2013	8:43	3.972	12.125
50	AR12543OR	E4H6257R.D	11/19/2013	9:01	3.972	12.122
51	MB-74821	E4H6262R.D	11/19/2013	10:53	3.973	12.128
52	LCS-74821	E4H6263R.D	11/19/2013	11:11	3.973	12.127
53	CDE-OU1-NM1-F36-186	E4H6266R.D	11/19/2013	12:06	3.972	12.124

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2253 Mod. Ref No.: SDG No.: SM2253

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-FW18-17	E4H6267R.D	11/19/2013	12:23	3.972	12.123
55	CDE-OU1-NM1-FE18-17	E4H6268R.D	11/19/2013	12:41	3.971	12.124
56	AR16603OS	E4H6270R.D	11/19/2013	13:17	3.970	12.127
57	AR12543OS	E4H6271R.D	11/19/2013	13:35	3.972	12.126

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-15-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments Applicable QC Checklist

QC Inspector Name and Signature

Davis Raver

Date

11-15-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11-15-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Clear 50°

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Sample NM1-Area F. ~~N~~-F36 collected, Refusal @ 39" no sample @ 42". CDE-OU1-NM1-F36-186 Sent to MitKem for Analysis.

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments: Samples Shipped ~~via~~ to MitKem LAB via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: CDE-OU1-NM1-FW18-177, CDE-OU1-NM1-FE18-179 Sent for Analysis

Non-conformance Problems: NONE

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-15-13

Date

E:\SES Mikes Backup\Sampling\DCQCR\DQCReport.doc

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-15-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

DAVIS RAVEK

Date

11-15-13

E:\SES Mikes Backup\Sampling\DCQCR\PackStoreShip Checklist (007).doc

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-15-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	_____
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	_____
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	_____
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	_____
☒	☐	☐	Were chain-of-custody forms completed per SAP?	_____
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	_____
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	_____
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	_____
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	_____
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	_____
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	_____
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	_____
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	_____
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	_____
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	_____
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	_____
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	_____
☒	☐	☐	Were all destination laboratories notified of sample shipments?	_____

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	DAVIS RAVEN		11-15-15
CQC Systems Manager	[illegible]		11-15-15

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

041 NEW MARKET ROW
PCB Soil Sampling

(95)

11-15-13

Weather: Clear, 50°

Collecting Samples @ NMI - Area F.

Area F continued Failures. AS

Per Diego Garcia EPA/RPM

Collect 36" Sample, 42" Sample.

Sending Hold Samples FW-18,

FE-18. Send F36 Sample, Hold

FW2 Sample.

* SEE page 92 For FW18, FE18 Log.

* SEE page 73 For map Locations.

* Sample Refusal @ 59". No Sample

@ F42. Samples shipped to Mitkem 48T/A

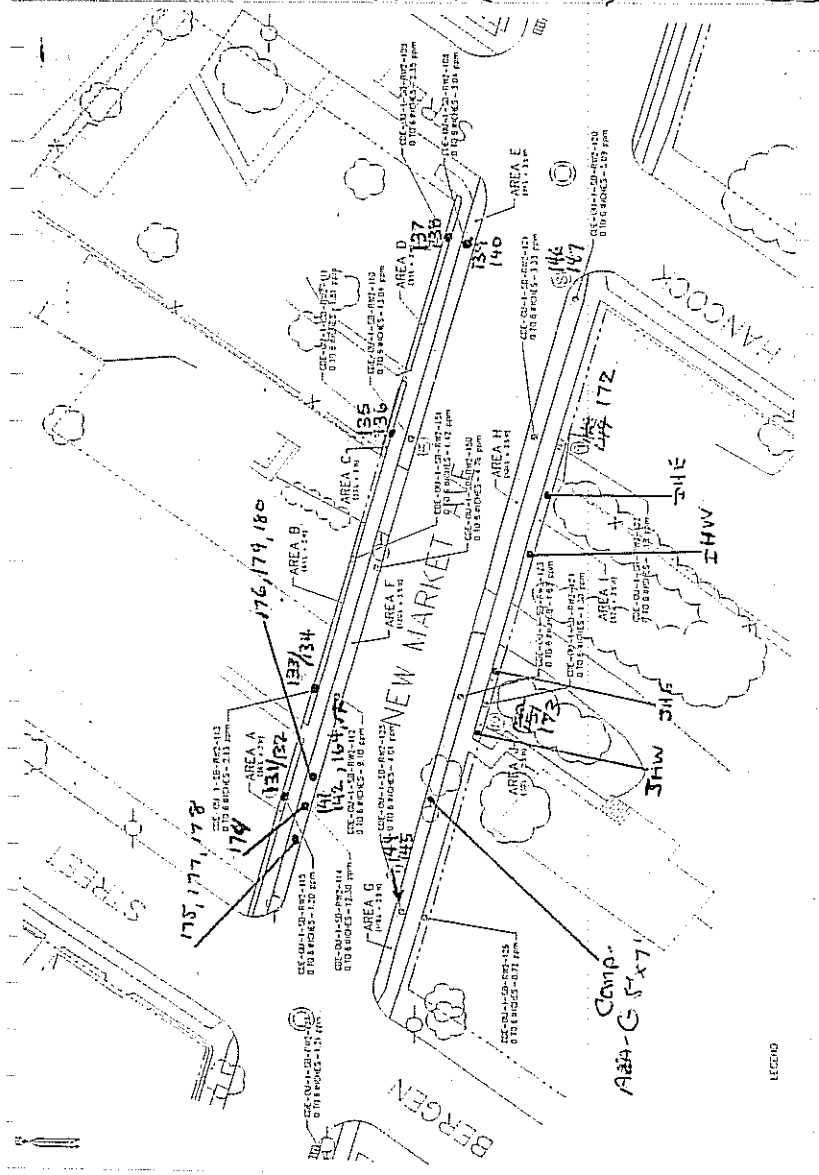
DATE/TIME	Sample Code	Mitkem Report	Results
11-15-13 1320	CDE-041-NMI-F36-186		

11-15-13

"Rain or Shine"

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NM1 (FIGURE 1)

73



10/21/13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080

Telephone #: 908 769 5301
Project Mgr: KIM LICKFIELD

Invoice To: SAME

P.O. No.: 9024 G278 RQN:

Project No.: 9278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI / D. RAVER

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards:

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS +-1262, 1268	Temp Blank
	NM1-FW18-177	11-12-13	0915	G	SO		1			X	
	NM1-FE18-178	11-12-13	1055	G	SO		1			X	
	NM1-F36-186	11-15-13	1520	G	SO		1			X	
	Temp Blank										X

Relinquished by:	Received by:	Date:	Time:	Temp°C
DR Davis Raver	FedEx	11-15-13	1700	

☐ EDD Format _____
☒ E-mail to KLickfield@Sevenson.com DRaver@Sevenson.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Davis Raver
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797169360593
Ship date: 11/15/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services: Saturday delivery
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

From: (908) 769-5301
Davis Raver
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1320130C200326

Ship Date: 15NOV13
ActWgt: 25.0 LB
CAD: 102252634/INET3430

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7971 6936 0593
0201

X0 NCOA

02852
RI-US
PVD

51AG1/05EB/1A0E

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 12/20/2013

TRANSMITTAL NO.: 01450A-494

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 01450A

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
75	Final Sample NM1#180, 188, 189 - ROW	TEST REPORTS	2	1.4		A	N	

REMARKS

Sample #180 passed criteria for PCB's at 0.440 ppm,
Sample #188 passed criteria for PCB's at 0.290 ppm,
Sample #189 passed criteria for PCB's at 0.420 ppm,
The criteria is <1 ppm

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

Report Date:
11-Dec-13 15:48

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Davis Raver

Work Order: M2309
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2309-01	CDE-OU1-NM1-FE24-180	Soil	12-Nov-13 10:45	22-Nov-13 10:50
M2309-02	CDE-OU1-NM1-FE12-20-188	Soil	21-Nov-13 13:20	22-Nov-13 10:50
M2309-03	CDE-OU1-NM1-FE18-10-189	Soil	21-Nov-13 13:35	22-Nov-13 10:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M2309

Client ID: SEVENSON
Project: Cornell Dubilier Superfund Site OU1
WO Name: Cornell Dubilier Superfund Site OU1
Location: CORNELL_BACKFILL, G278
Comments: N/A

Case:
SDG:
PO: G2789024

HC Due: 12/11/13
Fax Due: 11/25/13
Fax Report: ☑

Report Level: LEVEL 4A
Special Program:
EDD: ADR
SEDD2A
SEVENSON_XLS

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M2309-01A	CDE-OU1-NM1-FE24-180	11/12/2013 10:45	11/22/2013	Soil	PMoist	/					E2
M2309-01A	CDE-OU1-NM1-FE24-180	11/12/2013 10:45	11/22/2013	Soil	SW8082_S	/ + AR1262,1268				Y	E2
M2309-02A	CDE-OU1-NM1-FE12-20-188	11/21/2013 13:20	11/22/2013	Soil	PMoist	/					E2
M2309-02A	CDE-OU1-NM1-FE12-20-188	11/21/2013 13:20	11/22/2013	Soil	SW8082_S	/ + AR1262,1268				Y	E2
M2309-03A	CDE-OU1-NM1-FE18-10-189	11/21/2013 13:35	11/22/2013	Soil	PMoist	/					E2
M2309-03A	CDE-OU1-NM1-FE18-10-189	11/21/2013 13:35	11/22/2013	Soil	SW8082_S	/ + AR1262,1268				Y	E2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

11/25/2013 09:44

Lab Client Rep: Agnes R Huntley

* PCB Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sevenson Environmental Services Inc.

Project: Cornell Dubilier Superfund Site OU1

Laboratory Workorder / SDG #: M2309

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8082A

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E4
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard

Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

CDE-OU1-NM1-FE24-180 (M2309-01A) : Dilution Factor: 2

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift
- M5 miscellaneous - under this category, the justification is explained
- M6 software did not integrate peak
- M7 partial peak integration

The following samples were manually integrated:

AIBLKOV Tetrachloro-m-xylene on rear column due to M6

AR12216O4 Aroclor-1221 on front column , Tetrachloro-m-xylene on front column due to M6

AR12321O4 Aroclor-1232 on front column due to M6

AR12322O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12324O4 Aroclor-1232 on front column due to M6

AR12325O4 Aroclor-1232 on front column , Tetrachloro-m-xylene on front column due to M6

AR12421O4 Aroclor-1242 on front column due to M6

AR12422O4 Aroclor-1242 on front column due to M6

AR12423O4 Aroclor-1242 on front column due to M6

AR12424O4 Aroclor-1242 on front column due to M6

AR12425O4 Aroclor-1242 on front column due to M6

AR12543O4 Aroclor-1254 on front column due to M6

AR12621O4 Aroclor-1262 on front column due to M6

AR12622O4 Aroclor-1262 on front column due to M6

AR12623O4 Aroclor-1262 on front column due to M6

AR12624O4 Aroclor-1262 on front column due to M6

AR12625O4 Aroclor-1262 on front column due to M6

AR12626O4 Aroclor-1262 on front column due to M6

AR12681O4 Aroclor-1268 on rear column due to M6

AR12682O4 Aroclor-1268 on rear column due to M6

AR12683O4 Aroclor-1268 on rear column due to M6

AR12684O4 Aroclor-1268 on rear column due to M6

AR12685O4 Aroclor-1268 on rear column due to M6

AR12686O4 Aroclor-1268 on rear column due to M6

AR16601O4 Decachlorobiphenyl on front column due to M6

AR16602O4 Decachlorobiphenyl on front column due to M6

AR16606O4 Decachlorobiphenyl on front column due to M6

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____12/11/2013_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FE24-18

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2309-01A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H6321F.D/E4H6321R.D

% Moisture: 8.9 Decanted: (Y/N) N Date Received: 11/22/2013

Extraction: (Type) SONC Date Extracted: 11/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/25/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	72	U
53469-21-9	Aroclor-1242	72	U
12672-29-6	Aroclor-1248	72	U
11097-69-1	Aroclor-1254	440	
11096-82-5	Aroclor-1260	72	U
37324-23-5	Aroclor-1262	72	U
11100-14-4	Aroclor-1268	72	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FE12-20

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2309-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E4H6306F.D/E4H6306R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 11/22/2013

Extraction: (Type) SONC Date Extracted: 11/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	290	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-NM1-FE18-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M2309-03A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H6307F.D/E4H6307R.D

% Moisture: 14 Decanted: (Y/N) N Date Received: 11/22/2013

Extraction: (Type) SONC Date Extracted: 11/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	420	
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-74965

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-74965

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E4H6303F.D/E4H6303R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74965(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74965

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6304F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	110	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-74965(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-74965

Sample wt/vol: 30 (g/mL) G Lab File ID: E4H6304R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 11/22/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	130	
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	140	
37324-23-5	Aroclor-1262	33	U
11100-14-4	Aroclor-1268	33	U

2R - FORM II ARO-2

SOIL AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-74965	87	97	77	97			0
02	LCS-74965	82	93	76	95			0
03	CDE-OU1-NM1-FE12-20	77	87	64	83			0
04	CDE-OU1-NM1-FE18-10	78	83	62	77			0
05	CDE-OU1-NM1-FE24-18	84	91	73	92			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(34-147)
DCB = Decachlorobiphenyl	(60-125)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som13.12.05.06.1059

Page 1 of 1

SW846

3P - FORM III ARO-4
SOIL AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-74965

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Lab Sample ID: LCS-74965 LCS Lot No.: A072217

Date Extracted: 11/22/2013 Date Analyzed (1): 11/23/2013

Instrument ID (1): E4 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	114.3673	86	40-140
Aroclor-1260	133.3330	110.4834	83	60-130

Instrument ID (2): E4 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 11/23/2013

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
Aroclor-1016	133.3330	132.6342	99	40-140
Aroclor-1260	133.3330	140.2347	105	60-130

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

som13.12.05.06.1059

SW846

4F - FORM IV ARO

AROCLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-74965

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

Lab File ID: E4H6303F.D / E4H6303R.D Lab Sample ID: MB-74965

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 11/22/2013

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Acid Cleanup: (Y/N Y

Date Analyzed (1): 11/23/2013 Date Analyzed (2): 11/23/2013

Time Analyzed (1): 15:47 Time Analyzed (2): 15:47

Instrument ID (1): E4 Instrument ID (2): E4

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-74965	LCS-74965	11/23/2013	11/23/2013
02	CDE-OU1-NM1-FE12-20	M2309-02A	11/23/2013	11/23/2013
03	CDE-OU1-NM1-FE18-10	M2309-03A	11/23/2013	11/23/2013
04	CDE-OU1-NM1-FE24-18	M2309-01A	11/25/2013	11/25/2013

COMMENTS:

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971F.D	11/8/2013	16:35	3.256	9.712
02	AR122160 4	E4H5972F.D	11/8/2013	16:53	3.256	9.711
03	AR122120 4	E4H5973F.D	11/8/2013	17:11	3.257	9.711
04	AR122130 4	E4H5974F.D	11/8/2013	17:29	3.256	9.710
05	AR122140 4	E4H5975F.D	11/8/2013	17:47	3.256	9.711
06	AR122150 4	E4H5976F.D	11/8/2013	18:05	3.256	9.711
07	AR123210 4	E4H5977F.D	11/8/2013	18:23	3.257	9.711
08	AR123260 4	E4H5978F.D	11/8/2013	18:41	3.257	9.711
09	AR123220 4	E4H5979F.D	11/8/2013	18:59	3.256	9.712
10	AR123230 4	E4H5980F.D	11/8/2013	19:17	3.256	9.710
11	AR123240 4	E4H5981F.D	11/8/2013	19:35	3.257	9.710
12	AR123250 4	E4H5982F.D	11/8/2013	19:53	3.256	9.711
13	AR124210 4	E4H5983F.D	11/8/2013	20:11	3.257	9.710
14	AR124260 4	E4H5984F.D	11/8/2013	20:29	3.256	9.711
15	AR124220 4	E4H5985F.D	11/8/2013	20:47	3.257	9.710
16	AR124230 4	E4H5986F.D	11/8/2013	21:05	3.256	9.710
17	AR124240 4	E4H5987F.D	11/8/2013	21:24	3.256	9.710
18	AR124250 4	E4H5988F.D	11/8/2013	21:42	3.257	9.710
19	AR124810 4	E4H5989F.D	11/8/2013	22:00	3.256	9.710
20	AR124860 4	E4H5990F.D	11/8/2013	22:18	3.257	9.709
21	AR124820 4	E4H5991F.D	11/8/2013	22:36	3.256	9.710
22	AR124830 4	E4H5992F.D	11/8/2013	22:54	3.257	9.710
23	AR124840 4	E4H5993F.D	11/8/2013	23:12	3.256	9.711
24	AR124850 4	E4H5994F.D	11/8/2013	23:30	3.257	9.709
25	AR125410 4	E4H5995F.D	11/8/2013	23:48	3.256	9.709
26	AR125460 4	E4H5996F.D	11/9/2013	0:06	3.256	9.711
27	AR125420 4	E4H5997F.D	11/9/2013	0:24	3.256	9.710

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998F.D	11/9/2013	0:42	3.257	9.710
29	AR125440 4	E4H5999F.D	11/9/2013	1:00	3.256	9.709
30	AR125450 4	E4H6000F.D	11/9/2013	1:18	3.257	9.710
31	AR126210 4	E4H6001F.D	11/9/2013	1:36	3.256	9.709
32	AR126260 4	E4H6002F.D	11/9/2013	1:54	3.256	9.710
33	AR126220 4	E4H6003F.D	11/9/2013	2:13	3.256	9.709
34	AR126230 4	E4H6004F.D	11/9/2013	2:31	3.256	9.710
35	AR126240 4	E4H6005F.D	11/9/2013	2:49	3.257	9.709
36	AR126250 4	E4H6006F.D	11/9/2013	3:07	3.256	9.710
37	AR126810 4	E4H6007F.D	11/9/2013	3:25	3.256	9.710
38	AR126860 4	E4H6008F.D	11/9/2013	3:43	3.256	9.710
39	AR126820 4	E4H6009F.D	11/9/2013	4:01	3.256	9.710
40	AR126830 4	E4H6010F.D	11/9/2013	4:19	3.256	9.711
41	AR126840 4	E4H6011F.D	11/9/2013	4:37	3.256	9.710
42	AR126850 4	E4H6012F.D	11/9/2013	4:55	3.256	9.709
43	AR166010 4	E4H6013F.D	11/9/2013	5:13	3.255	9.710
44	AR166060 4	E4H6014F.D	11/9/2013	5:31	3.256	9.710
45	AR166020 4	E4H6015F.D	11/9/2013	5:49	3.255	9.710
46	AR166030 4	E4H6016F.D	11/9/2013	6:07	3.256	9.709
47	AR166040 4	E4H6017F.D	11/9/2013	6:26	3.256	9.709
48	AR166050 4	E4H6018F.D	11/9/2013	6:44	3.256	9.711
49	AR166030V	E4H6295F.D	11/23/2013	12:35	3.256	9.709
50	AR125430V	E4H6297F.D	11/23/2013	13:51	3.260	9.716
51	MB-74965	E4H6303F.D	11/23/2013	15:47	3.257	9.709
52	LCS-74965	E4H6304F.D	11/23/2013	16:05	3.256	9.708
53	CDE-OU1-NM1-FE12-20	E4H6306F.D	11/23/2013	16:41	3.257	9.708

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.255 DCB: 9.710

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-FE18-10	E4H6307F.D	11/23/2013	16:59	3.256	9.708
55	AR16603OW	E4H6309F.D	11/23/2013	17:35	3.256	9.707
56	AR12543OW	E4H6310F.D	11/23/2013	17:54	3.255	9.708
57	AR16603OX	E4H6318F.D	11/25/2013	10:08	3.261	9.717
58	AR12543OX	E4H6319F.D	11/25/2013	10:26	3.255	9.711
59	CDE-OU1-NM1-FE24-18	E4H6321F.D	11/25/2013	11:02	3.255	9.709
60	AR16603OY	E4H6323F.D	11/25/2013	11:39	3.255	9.710
61	AR12543OY	E4H6324F.D	11/25/2013	11:56	3.255	9.709

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR122110 4	E4H5971R.D	11/8/2013	16:35	3.973	12.131
02	AR122160 4	E4H5972R.D	11/8/2013	16:53	3.973	12.129
03	AR122120 4	E4H5973R.D	11/8/2013	17:11	3.973	12.129
04	AR122130 4	E4H5974R.D	11/8/2013	17:29	3.973	12.130
05	AR122140 4	E4H5975R.D	11/8/2013	17:47	3.973	12.127
06	AR122150 4	E4H5976R.D	11/8/2013	18:05	3.972	12.131
07	AR123210 4	E4H5977R.D	11/8/2013	18:23	3.974	12.128
08	AR123260 4	E4H5978R.D	11/8/2013	18:41	3.972	12.126
09	AR123220 4	E4H5979R.D	11/8/2013	18:59	3.973	12.128
10	AR123230 4	E4H5980R.D	11/8/2013	19:17	3.973	12.128
11	AR123240 4	E4H5981R.D	11/8/2013	19:35	3.973	12.130
12	AR123250 4	E4H5982R.D	11/8/2013	19:53	3.973	12.131
13	AR124210 4	E4H5983R.D	11/8/2013	20:11	3.973	12.129
14	AR124260 4	E4H5984R.D	11/8/2013	20:29	3.973	12.126
15	AR124220 4	E4H5985R.D	11/8/2013	20:47	3.973	12.128
16	AR124230 4	E4H5986R.D	11/8/2013	21:05	3.973	12.128
17	AR124240 4	E4H5987R.D	11/8/2013	21:24	3.973	12.128
18	AR124250 4	E4H5988R.D	11/8/2013	21:42	3.974	12.130
19	AR124810 4	E4H5989R.D	11/8/2013	22:00	3.973	12.130
20	AR124860 4	E4H5990R.D	11/8/2013	22:18	3.974	12.130
21	AR124820 4	E4H5991R.D	11/8/2013	22:36	3.973	12.130
22	AR124830 4	E4H5992R.D	11/8/2013	22:54	3.974	12.129
23	AR124840 4	E4H5993R.D	11/8/2013	23:12	3.973	12.129
24	AR124850 4	E4H5994R.D	11/8/2013	23:30	3.974	12.127
25	AR125410 4	E4H5995R.D	11/8/2013	23:48	3.973	12.130
26	AR125460 4	E4H5996R.D	11/9/2013	0:06	3.973	12.131
27	AR125420 4	E4H5997R.D	11/9/2013	0:24	3.974	12.127

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR125430 4	E4H5998R.D	11/9/2013	0:42	3.974	12.131
29	AR125440 4	E4H5999R.D	11/9/2013	1:00	3.973	12.128
30	AR125450 4	E4H6000R.D	11/9/2013	1:18	3.973	12.132
31	AR126210 4	E4H6001R.D	11/9/2013	1:36	3.974	12.132
32	AR126260 4	E4H6002R.D	11/9/2013	1:54	3.973	12.132
33	AR126220 4	E4H6003R.D	11/9/2013	2:13	3.972	12.128
34	AR126230 4	E4H6004R.D	11/9/2013	2:31	3.972	12.129
35	AR126240 4	E4H6005R.D	11/9/2013	2:49	3.974	12.129
36	AR126250 4	E4H6006R.D	11/9/2013	3:07	3.973	12.130
37	AR126810 4	E4H6007R.D	11/9/2013	3:25	3.973	12.130
38	AR126860 4	E4H6008R.D	11/9/2013	3:43	3.973	12.127
39	AR126820 4	E4H6009R.D	11/9/2013	4:01	3.974	12.128
40	AR126830 4	E4H6010R.D	11/9/2013	4:19	3.972	12.129
41	AR126840 4	E4H6011R.D	11/9/2013	4:37	3.972	12.128
42	AR126850 4	E4H6012R.D	11/9/2013	4:55	3.973	12.129
43	AR166010 4	E4H6013R.D	11/9/2013	5:13	3.973	12.126
44	AR166060 4	E4H6014R.D	11/9/2013	5:31	3.973	12.131
45	AR166020 4	E4H6015R.D	11/9/2013	5:49	3.971	12.131
46	AR166030 4	E4H6016R.D	11/9/2013	6:07	3.972	12.129
47	AR166040 4	E4H6017R.D	11/9/2013	6:26	3.973	12.129
48	AR166050 4	E4H6018R.D	11/9/2013	6:44	3.972	12.129
49	AR166030V	E4H6295R.D	11/23/2013	12:35	3.972	12.123
50	AR125430V	E4H6297R.D	11/23/2013	13:51	3.970	12.126
51	MB-74965	E4H6303R.D	11/23/2013	15:47	3.974	12.124
52	LCS-74965	E4H6304R.D	11/23/2013	16:05	3.973	12.123
53	CDE-OU1-NM1-FE12-20	E4H6306R.D	11/23/2013	16:41	3.973	12.124

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)

DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO

AROCLOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M2309 Mod. Ref No.: SDG No.: SM2309

GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 11/08/2013 11/09/2013

Instrument ID: E4

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION

TCX: 3.972 DCB: 12.129

	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
54	CDE-OU1-NM1-FE18-10	E4H6307R.D	11/23/2013	16:59	3.972	12.124
55	AR16603OW	E4H6309R.D	11/23/2013	17:35	3.972	12.122
56	AR12543OW	E4H6310R.D	11/23/2013	17:54	3.973	12.124
57	AR16603OX	E4H6318R.D	11/25/2013	10:08	3.968	12.131
58	AR12543OX	E4H6319R.D	11/25/2013	10:26	3.971	12.127
59	CDE-OU1-NM1-FE24-18	E4H6321R.D	11/25/2013	11:02	3.972	12.127
60	AR16603OY	E4H6323R.D	11/25/2013	11:39	3.971	12.124
61	AR12543OY	E4H6324R.D	11/25/2013	11:56	3.972	12.126

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DCB = Decachlorobiphenyl	(± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-21-13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)	X		
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments
Applicable QC Checklist

QC Inspector Name and Signature
Davis Rauer Jr
DR

Date
11-21-13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 11-21-13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: Clear, 44°

Subcontractors Present Onsite: None

Health and Safety Measures Necessary for Planned Activities: Level D PPE

Health and Safety Violations and Corrective Actions: None

Planned Daily Activities: Sample Area F offsets, send Secondary Sample from Area F

Description of Chemical Data Acquisition Work Performed: Analysis Performed Total PCB's to include additional Aroclors 1262, 1268

Sample Shipments and Problems Regarding Sampling and Sample Shipments:

Samples Shipped to MitKem via FedEx overnight

Chemical Parameter Measurement Problems: None

Contingency Sampling: Secondary Samples Collected will be sent to Lab pending Results of Primary Samples

Non-conformance Problems: NONE

Corrective Actions (including approvals): N/A

Initials of Personnel Performing Corrective Actions: N/A

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): N/A

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature

11-21-13

Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-21-13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler? Temp Blank	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab? Scanned/Email	X			

Notes/Comments

QC Inspector Name and Signature

Davis Rauer

Date

11-21-13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 11-21-13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** **OR** ☑ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☐	☐	☒	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments:

Sevenson Project Manager

	Name	Signature	Date
QC Reviewer	DAVIS RIVER		11-21-13
CQC Systems Manager	William Zambrano		11-27-13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: 2DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: SEVENSON ENVIRONMENTAL
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
Telephone #: 908 769 5301
Project Mgr. KIM LICKFIELD

Invoice To: SAME
P.O. No.: 6278 9024 RQN:

Project No.: 6278
Site Name: CORNELL-DUBILIER SUPERFUND SITE
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI / D. RAUER

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id: (CDE-OU1-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TOTAL PCBS +1262, 1268	Temp Blank							
	NM1-FE24-180	11-12-13	1045	G	SO		1			X								
	NM1-FE12-20-188	11-21-13	1320	G	SO		1			X								
	NM1-FE18-10-189	11-21-13	1355	G	SO		1			X								
											X							

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic
Analyses: TOTAL PCBS +1262, 1268; Temp Blank

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp°C
[signature]	FedEx	11-21-13	1700	

☐ EDD Format
☒ E-mail to KLickfield@sevenson.com
DRauer@sevenson.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

From: (908) 769-5301
Davis Raver
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

Ship Date: 21NOV13
ActWgt: 20.0 LB
CAD: 102252034/INET3430

Delivery Address Bar Code

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

SHIP TO: (401) 732-3400 BILL RECIPIENT

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

FRI - 22 NOV 10:30A
PRIORITY OVERNIGHT

TRK# 7972 1720 9554
0201

ED NCOA

02852
RI-US
PVD

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Davis Raver
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 797217209554
Ship date: 11/21/2013
Estimated shipping charges: 0.00

Package Information
Pricing option: FedEx Standard Rate
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 20 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: Recipient
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.
The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedEx Service Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

DUI SOIL SAMPLE
LOG BOOK 2 OF

"Rite in the Rain"®
ALL-WEATHER
JOURNAL
No. 393

AUG 2013 -

OU1 New Market Row (97)

Clear, 44° PCB Soil Sampling 11-21-13

Collect Samples Area F, 10' offsets From East Sample Location, Collect Sample Area F 20' From East Sample Location. Sample ID# will include Offset ~~Local~~ (DRL) Footage. EXP: ~~CDE~~ (DRC)

CDE-OU1-NM1-FE12-20-xxx

DEPTH 20' offset

DATE/TIME	Sample Code	Mitkem #	Results
11/21 1320	CDE-OU1 NM1-FE12-20-188		
11/21 1335	NM1-FE18-10-189		
11/21	NM1-FE24-10-190		

* Secondary Sample Sent for Analysis

ID# CDE-OU1-NM1-FE24-180

* Please see map pg 73 For Sample Locations

Hold Sample #190 (Secondary)

Sent All Samples to Mitkem

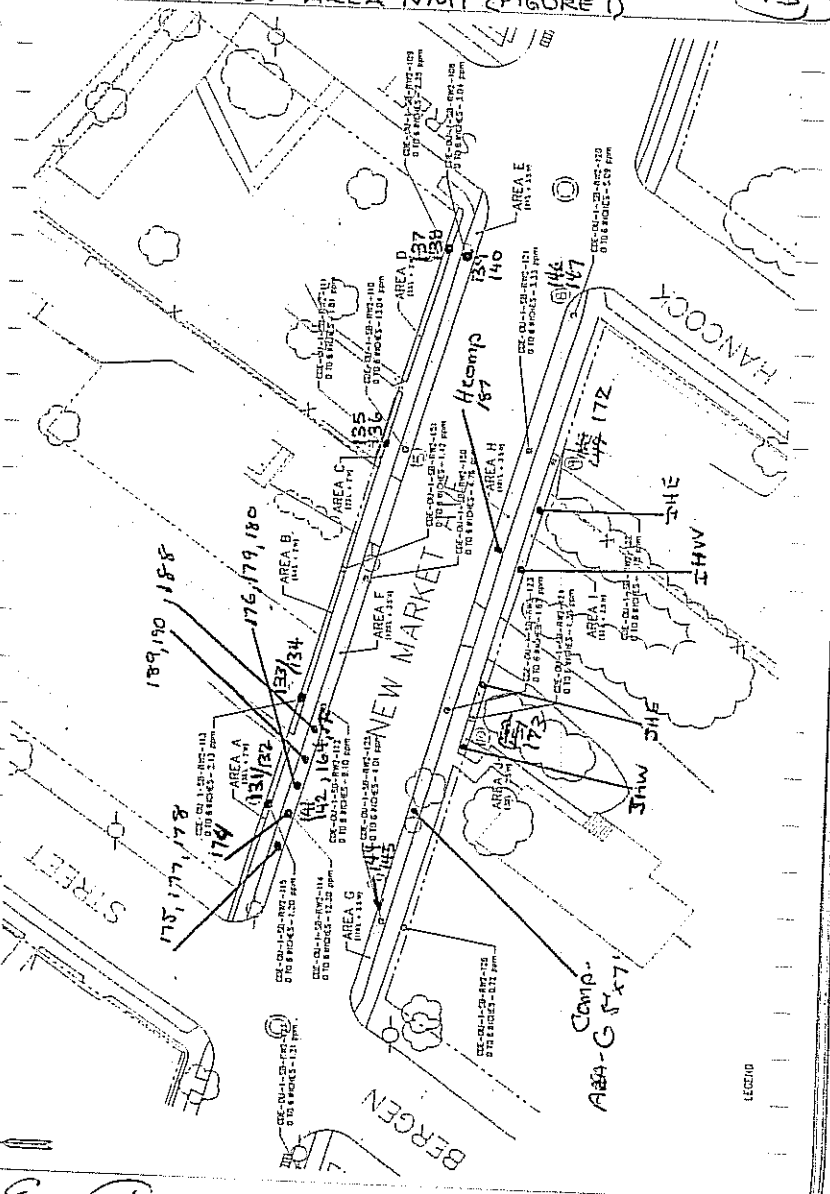
Packed / ICE

[signature] 11-21-13

"Rite in the Rain"

DUI NEW MARKET RIGHT OF WAY
PCB SOIL SAMPLING
MAP OF AREA NMI (FIGURE 1)

73



10/21/13

"Return the favor"

Appendix H

Backfill Compaction Test Results

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 06/06/2012

TRANSMITTAL NO.: 02320-28

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
1	Nova -Backfill Testing Lab Certification	CERTIFICATES	2	1.6		A	N	F

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, COR

DATE: 14 June 2012

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 06/06/2012

TRANSMITTAL NO.: 02320-28

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
1	Nova -Backfill Testing Lab Certification	CERTIFICATES	2	1.6		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

DEPARTMENT OF THE ARMY
ENGINEER RESEARCH AND DEVELOPMENT CENTER, CORPS OF ENGINEERS
GEOTECHNICAL AND STRUCTURES LABORATORY
WATERWAYS EXPERIMENT STATION, 3909 HALLS FERRY ROAD
VICKSBURG, MISSISSIPPI 39180-6199

December 20, 2010

Reply to the Attention of:

Concrete and Materials Branch

Mr. Chandrakant Patel
NOVA Engineering & Environmental, LLC
4 Mark Road, Unit A
Kenilworth, NJ 07033

Dear Mr. Patel:

In reference to your check no. 14464, dated December 2, 2010, and audit agreement, dated December 15, 2010, an audit based on your AASHTO Accreditation was performed on documents submitted by your laboratory. We examined the AMRL On-site Assessment Report No. 267L, dated June 24, 2009, the CCRL Inspection Report No. F-149, dated September 28, 2009 and the AASHTO accreditation certificate effective December 20, 2010.

Your Quality System meets the requirements of the U.S. Army Corps of Engineers. The material test methods that you are validated to perform for the U.S. Army Corps of Engineers were determined from the inspection reports from AASHTO and are as follows:

Concrete Tests: ASTM C31, C39, C138, C143, C172, C173, C231, C1064, C1077, C1231, and E329.

Soil Tests: ASTM D698, D1140, D1557, D2216, D3740, D4318, D6938, and E329.

We will add your laboratory to the list of commercial laboratories qualified to conduct material tests for the U.S. Army Corps of Engineers; see the Materials Testing Center homepage at http://www.wes.army.mil/SL/MTC/mtc.htm. All Corps offices will be notified of this decision and will have the opportunity to use your services. NOVA Engineering & Environmental, LLC, Kenilworth, NJ will remain on our list of laboratories qualified to conduct material tests until **December 20, 2012** two (2) years from the date of the audit. In the event your AASHTO accreditation is suspended in whole or part, NOVA Engineering & Environmental, LLC, Kenilworth, NJ is to notify the Materials Testing Center immediately to perform a re-evaluation of your laboratory's validation. Failure to notify the Materials Testing Center will result in immediate suspension of your U.S. Army Corps of Engineers validation.

Sincerely,

Alfred B. Crawley, PE
Director
Materials Testing Center

Copy Furnished:
Peter Destefano / New York District

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 08/09/2012

TRANSMITTAL NO.: 02320-52

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
2	Common Fill -Topsoil Analytical Test-EME	TEST REPORTS	2	1.6		A	N	

REMARKS
Passed Radilogical and Chemical Testing
Topsoil pased PH and organics
Common Fill passed sieve test

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: CDESS-Comfill-001; CDESS-Topsoil-001
Prepared By: Ken Paisley
CC: Kim Lickfield
Date: 08/09/12

Waste Determination (if applicable): N/A (Site Backfill)

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to Site ROD criteria and the site-specific Sampling and Analysis Plan. The analyses performed are of acceptable data quality.

Analytical results from the sample event were compared against RDCSCC and Project Action Limit (IGWSCC NJAC 7:26 "Clean Soil Criteria") to identify exceedances. The sample did not exceed the Site criteria*.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that I have reviewed the data and find it to be as presented above.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

RADIOLOGICAL DATA

Sample ID	Nuclide Reported by Gamma Spec	Nuclide Of Interest (NJAC 7:28-12)	Result (pCi/g)	Project Action Limit (pCi/g)
CDESS-COMFILL-001	Actinium - 228	Th - 232	0.558	2
CDESS-COMFILL-001	Bismuth - 214	Ra - 226	1.05	2
CDESS-COMFILL-001	Lead - 214	Ra - 226	0.207	2
CDESS-COMFILL-001	Thorium - 234	U - 238	2.34	14
CDESS-TOPSOIL-001	Actinium - 228	Th - 232	0.487	2
CDESS-TOPSOIL-001	Bismuth - 214	Ra - 226	0.702	2
CDESS-TOPSOIL-001	Lead - 214	Ra - 226	0.576	2
CDESS-TOPSOIL-001	Thorium - 234	U - 238	2.17	14

Report Date:
26-Jul-12 16:54

☑ Final Report
Re-Issued Report
Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L1447
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L1447-01	CDESS-COMFILL-001	Soil	27-Jun-12 10:30	28-Jun-12 08:55
L1447-02	CDESS-TOPSOIL-001	Soil	27-Jun-12 10:40	28-Jun-12 08:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01B

Sample wt/vol: 4.60 (g/mL) G Lab File ID: V1M7567.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 10 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	6.0	U
67-64-1	Acetone	6.0	U
75-15-0	Carbon disulfide	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
78-93-3	2-Butanone	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
107-06-2	1,2-Dichloroethane	6.0	U
71-43-2	Benzene	6.0	U
79-01-6	Trichloroethene	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-88-3	Toluene	6.0	U
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
127-18-4	Tetrachloroethene	6.0	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	6.0	U
100-41-4	Ethylbenzene	6.0	U
1330-20-7	Xylene (Total)	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01B

Sample wt/vol: 4.60 (g/mL) G Lab File ID: V1M7567.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 10 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
107-02-8	Acrolein	30	U
107-13-1	Acrylonitrile	6.0	U
79-20-9	Methyl acetate	6.0	U
75-65-0	tert-Butyl Alcohol	12	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02B

Sample wt/vol: 5.40 (g/mL) G Lab File ID: V1M7568.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 24 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	6.1	U
74-87-3	Chloromethane	6.1	U
75-01-4	Vinyl chloride	6.1	U
74-83-9	Bromomethane	6.1	U
75-00-3	Chloroethane	6.1	U
75-69-4	Trichlorofluoromethane	6.1	U
75-35-4	1,1-Dichloroethene	6.1	U
67-64-1	Acetone	6.1	U
75-15-0	Carbon disulfide	6.1	U
75-09-2	Methylene chloride	6.1	U
156-60-5	trans-1,2-Dichloroethene	6.1	U
1634-04-4	Methyl tert-butyl ether	6.1	U
75-34-3	1,1-Dichloroethane	6.1	U
78-93-3	2-Butanone	6.1	U
156-59-2	cis-1,2-Dichloroethene	6.1	U
67-66-3	Chloroform	6.1	U
71-55-6	1,1,1-Trichloroethane	6.1	U
56-23-5	Carbon tetrachloride	6.1	U
107-06-2	1,2-Dichloroethane	6.1	U
71-43-2	Benzene	6.1	U
79-01-6	Trichloroethene	6.1	U
78-87-5	1,2-Dichloropropane	6.1	U
75-27-4	Bromodichloromethane	6.1	U
10061-01-5	cis-1,3-Dichloropropene	6.1	U
108-88-3	Toluene	6.1	U
10061-02-6	trans-1,3-Dichloropropene	6.1	U
79-00-5	1,1,2-Trichloroethane	6.1	U
127-18-4	Tetrachloroethene	6.1	U
124-48-1	Dibromochloromethane	6.1	U
106-93-4	1,2-Dibromoethane	6.1	U
108-90-7	Chlorobenzene	6.1	U
100-41-4	Ethylbenzene	6.1	U
1330-20-7	Xylene (Total)	6.1	U
100-42-5	Styrene	6.1	U
75-25-2	Bromoform	6.1	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDESS-TOPSOIL-00
1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02B

Sample wt/vol: 5.40 /(g/mL) G Lab File ID: V1M7568.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 24 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U
541-73-1	1,3-Dichlorobenzene	6.1	U
106-46-7	1,4-Dichlorobenzene	6.1	U
95-50-1	1,2-Dichlorobenzene	6.1	U
96-12-8	1,2-Dibromo-3-chloropropane	6.1	U
120-82-1	1,2,4-Trichlorobenzene	6.1	U
107-02-8	Acrolein	31	U
107-13-1	Acrylonitrile	6.1	U
79-20-9	Methyl acetate	6.1	U
75-65-0	tert-Butyl Alcohol	12	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S3I1195.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	180	U
111-44-4	Bis(2-chloroethyl)ether	180	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	180	U
106-44-5	4-Methylphenol	180	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U
78-59-1	Isophorone	180	U
105-67-9	2,4-Dimethylphenol	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
87-68-3	Hexachlorobutadiene	180	U
91-57-6	2-Methylnaphthalene	180	U
77-47-4	Hexachlorocyclopentadiene	180	U
88-06-2	2,4,6-Trichlorophenol	180	U
95-95-4	2,4,5-Trichlorophenol	370	U
88-74-4	2-Nitroaniline	370	U
208-96-8	Acenaphthylene	180	U
606-20-2	2,6-Dinitrotoluene	180	U
83-32-9	Acenaphthene	180	U
51-28-5	2,4-Dinitrophenol	370	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
86-73-7	Fluorene	180	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	180	U
118-74-1	Hexachlorobenzene	180	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	180	U
120-12-7	Anthracene	180	U
86-74-8	Carbazole	180	U
84-74-2	Di-n-butylphthalate	180	U
206-44-0	Fluoranthene	180	U
129-00-0	Pyrene	180	U
85-68-7	Butylbenzylphthalate	180	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-00 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S3I1195.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	180	U
56-55-3	Benzo(a)anthracene	180	U
218-01-9	Chrysene	180	U
117-81-7	Bis(2-ethylhexyl)phthalate	46	J
117-84-0	Di-n-octylphthalate	180	U
205-99-2	Benzo(b)fluoranthene	180	U
207-08-9	Benzo(k)fluoranthene	180	U
50-32-8	Benzo(a)pyrene	180	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	180	U
92-52-4	1,1'-Biphenyl	180	U
98-86-2	Acetophenone	180	U
1912-24-9	Atrazine	180	U
103-33-3	Azobenzene	180	U
100-52-7	Benzaldehyde	180	U
92-87-5	Benzidine	180	U
39638-32-9	Bis(2-chloroisopropyl)ether	180	U
105-60-2	Caprolactam	180	U
62-75-9	N-Nitrosodimethylamine	180	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S3I1196.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
105-67-9	2,4-Dimethylphenol	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
87-68-3	Hexachlorobutadiene	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	430	U
88-74-4	2-Nitroaniline	430	U
208-96-8	Acenaphthylene	210	U
606-20-2	2,6-Dinitrotoluene	210	U
83-32-9	Acenaphthene	210	U
51-28-5	2,4-Dinitrophenol	430	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine	210	U
118-74-1	Hexachlorobenzene	210	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	51	J
129-00-0	Pyrene	51	J
85-68-7	Butylbenzylphthalate	45	J

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S3I1196.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	62	J
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
92-52-4	1,1'-Biphenyl	210	U
98-86-2	Acetophenone	210	U
1912-24-9	Atrazine	210	U
103-33-3	Azobenzene	210	U
100-52-7	Benzaldehyde	210	U
92-87-5	Benzidine	210	U
39638-32-9	Bis(2-chloroisopropyl)ether	210	U
105-60-2	Caprolactam	210	U
62-75-9	N-Nitrosodimethylamine	210	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-00 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 30.0 (g/mL) G / Lab File ID: E5H9500F.D/E5H9500R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: / 30.5 (g/mL) G Lab File ID: E5H9501F.D/E5H9501R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L1854F.D/E2L1854R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/03/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: 30.5 (g/mL) g Lab File ID: E2L1855F.D/E2L1855R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/03/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1447

Matrix (soil/water): SOIL Lab Sample ID: L1447-01

Level (low/med): MED Date Received: 06/28/2012

% Solids: 90.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1320			P
7440-36-0	Antimony	0.39	U		P
7440-38-2	Arsenic	0.83	B		P
7440-39-3	Barium	4.6	B		P
7440-41-7	Beryllium	0.0015	U		P
7440-43-9	Cadmium	0.53			P
7440-47-3	Chromium	6.5			P
7440-48-4	Cobalt	0.36	B		P
7440-50-8	Copper	1.1	B		P
7439-92-1	Lead	3.3			P
7439-96-5	Manganese	3.0			P
7439-97-6	Mercury	0.017	B		CV
7440-02-0	Nickel	1.3	B		P
7782-49-2	Selenium	0.73	B		P
7440-22-4	Silver	0.11	B		P
7440-28-0	Thallium	0.28	B		P
7440-62-2	Vanadium	5.4			P
7440-66-6	Zinc	2.6	B		P
57-12-5	Cyanide	0.50	U		CA

Comments:

Hm11.12.12.A

FORM I - IN SW846

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1447

Matrix (soil/water): SOIL Lab Sample ID: L1447-02

Level (low/med): MED Date Received: 06/28/2012

% Solids: 75.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5150			P
7440-36-0	Antimony	0.53	B		P
7440-38-2	Arsenic	5.3			P
7440-39-3	Barium	33.4			P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	0.13	B		P
7440-47-3	Chromium	11.9			P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	9.5			P
7439-92-1	Lead	18.9			P
7439-96-5	Manganese	215			P
7439-97-6	Mercury	0.023	B		CV
7440-02-0	Nickel	4.0			P
7782-49-2	Selenium	0.75	U		P
7440-22-4	Silver	0.075	U		P
7440-28-0	Thallium	0.26	U		P
7440-62-2	Vanadium	17.1			P
7440-66-6	Zinc	28.3			P
57-12-5	Cyanide	0.57	U		CA

Comments:

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: L1447
Pace Project No.: 3072462

Sample: CDESS-COMFILL-001 Lab ID: 3072462001 Collected: 06/27/12 10:30 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	0.558 ± 0.252 (0.185)	pCi/g	07/25/12 15:02	14331-83-0	
Bismuth-212	EPA 901.1m	1.05 ± 0.628 (0.709)	pCi/g	07/25/12 15:02	14913-49-6	
Bismuth-214	EPA 901.1m	1.05 ± 0.160 (0.577)	pCi/g	07/25/12 15:02	14733-03-0	
Lead-212	EPA 901.1m	0.207 ± 0.153 (0.143)	pCi/g	07/25/12 15:02	15092-94-1	
Lead-214	EPA 901.1m	1.02 ± 0.208 (0.131)	pCi/g	07/25/12 15:02	15067-28-4	
Potassium-40	EPA 901.1m	5.91 ± 1.07 (0.486)	pCi/g	07/25/12 15:02	13966-00-2	
Radium-226	EPA 901.1m	1.11 ± 0.190 (0.347)	pCi/g	07/25/12 15:02	13982-63-3	
Radium-228	EPA 901.1m	0.558 ± 0.252 (0.185)	pCi/g	07/25/12 15:02	15262-20-1	
Thallium-208	EPA 901.1m	0.157 ± 0.0620 (0.0610)	pCi/g	07/25/12 15:02	14913-50-9	
Thorium-234	EPA 901.1m	2.34 ± 2.71 (4.70)	pCi/g	07/25/12 15:02	15065-10-8	
Uranium-235	EPA 901.1m	0.0720 ± 0.226 (0.409)	pCi/g	07/25/12 15:02	15117-96-1	

Sample: CDESS-TOPSOIL-001 Lab ID: 3072462002 Collected: 06/27/12 10:40 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	0.487 ± 0.217 (0.202)	pCi/g	07/25/12 16:04	14331-83-0	
Bismuth-212	EPA 901.1m	0.859 ± 0.653 (0.928)	pCi/g	07/25/12 16:04	14913-49-6	
Bismuth-214	EPA 901.1m	0.702 ± 0.409 (0.862)	pCi/g	07/25/12 16:04	14733-03-0	
Lead-212	EPA 901.1m	0.851 ± 0.160 (0.104)	pCi/g	07/25/12 16:04	15092-94-1	
Lead-214	EPA 901.1m	0.576 ± 0.184 (0.273)	pCi/g	07/25/12 16:04	15067-28-4	
Potassium-40	EPA 901.1m	7.49 ± 1.29 (0.529)	pCi/g	07/25/12 16:04	13966-00-2	
Radium-226	EPA 901.1m	0.551 ± 0.110 (0.160)	pCi/g	07/25/12 16:04	13982-63-3	
Radium-228	EPA 901.1m	0.487 ± 0.217 (0.202)	pCi/g	07/25/12 16:04	15262-20-1	
Thallium-208	EPA 901.1m	0.151 ± 0.0740 (0.121)	pCi/g	07/25/12 16:04	14913-50-9	
Thorium-234	EPA 901.1m	2.17 ± 2.90 (5.03)	pCi/g	07/25/12 16:04	15065-10-8	
Uranium-235	EPA 901.1m	0.158 ± 0.239 (0.440)	pCi/g	07/25/12 16:04	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: L1447
Pace Project No.: 3072462

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3072462001	CDESS-COMFILL-001	Solid	06/27/12 10:30	06/29/12 10:10
3072462002	CDESS-TOPSOIL-001	Solid	06/27/12 10:40	06/29/12 10:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

July 26, 2012

Ms. Agnes Huntley
Spectrum Analytical, Featuring Hanibal Technology
175 Metro Center Blvd
Warwick, RI 02886

RE: Project: L1447
Pace Project No.: 3072462

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on June 29, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report reissued on 7/26/12 to reflect results after the ingrowth period was completed.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: L1447
Pace Project No.: 3072462

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Virginia VELAP (Cert # 460198)
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: L1447
Pace Project No.: 3072462

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3072462001	CDESS-COMFILL-001	Solid	06/27/12 10:30	06/29/12 10:10
3072462002	CDESS-TOPSOIL-001	Solid	06/27/12 10:40	06/29/12 10:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: L1447
Pace Project No.: 3072462

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3072462001	CDESS-COMFILL-001	EPA 901.1m	AEH	11
3072462002	CDESS-TOPSOIL-001	EPA 901.1m	AEH	11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: L1447
Pace Project No.: 3072462

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: July 26, 2012

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: L1447
Pace Project No.: 3072462

Sample: CDESS-COMFILL-001 Lab ID: **3072462001** Collected: 06/27/12 10:30 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.558 ± 0.252 (0.185)**	pCi/g	07/25/12 15:02	14331-83-0	
Bismuth-212	EPA 901.1m	**1.05 ± 0.628 (0.709)**	pCi/g	07/25/12 15:02	14913-49-6	
Bismuth-214	EPA 901.1m	**1.05 ± 0.160 (0.577)**	pCi/g	07/25/12 15:02	14733-03-0	
Lead-212	EPA 901.1m	**0.207 ± 0.153 (0.143)**	pCi/g	07/25/12 15:02	15092-94-1	
Lead-214	EPA 901.1m	**1.02 ± 0.208 (0.131)**	pCi/g	07/25/12 15:02	15067-28-4	
Potassium-40	EPA 901.1m	**5.91 ± 1.07 (0.486)**	pCi/g	07/25/12 15:02	13966-00-2	
Radium-226	EPA 901.1m	**1.11 ± 0.190 (0.347)**	pCi/g	07/25/12 15:02	13982-63-3	
Radium-228	EPA 901.1m	**0.558 ± 0.252 (0.185)**	pCi/g	07/25/12 15:02	15262-20-1	
Thallium-208	EPA 901.1m	**0.157 ± 0.0620 (0.0610)**	pCi/g	07/25/12 15:02	14913-50-9	
Thorium-234	EPA 901.1m	**2.34 ± 2.71 (4.70)**	pCi/g	07/25/12 15:02	15065-10-8	
Uranium-235	EPA 901.1m	**0.0720 ± 0.226 (0.409)**	pCi/g	07/25/12 15:02	15117-96-1	

Sample: CDESS-TOPSOIL-001 Lab ID: **3072462002** Collected: 06/27/12 10:40 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.487 ± 0.217 (0.202)**	pCi/g	07/25/12 16:04	14331-83-0	
Bismuth-212	EPA 901.1m	**0.859 ± 0.653 (0.928)**	pCi/g	07/25/12 16:04	14913-49-6	
Bismuth-214	EPA 901.1m	**0.702 ± 0.409 (0.862)**	pCi/g	07/25/12 16:04	14733-03-0	
Lead-212	EPA 901.1m	**0.851 ± 0.160 (0.104)**	pCi/g	07/25/12 16:04	15092-94-1	
Lead-214	EPA 901.1m	**0.576 ± 0.184 (0.273)**	pCi/g	07/25/12 16:04	15067-28-4	
Potassium-40	EPA 901.1m	**7.49 ± 1.29 (0.529)**	pCi/g	07/25/12 16:04	13966-00-2	
Radium-226	EPA 901.1m	**0.551 ± 0.110 (0.160)**	pCi/g	07/25/12 16:04	13982-63-3	
Radium-228	EPA 901.1m	**0.487 ± 0.217 (0.202)**	pCi/g	07/25/12 16:04	15262-20-1	
Thallium-208	EPA 901.1m	**0.151 ± 0.0740 (0.121)**	pCi/g	07/25/12 16:04	14913-50-9	
Thorium-234	EPA 901.1m	**2.17 ± 2.90 (5.03)**	pCi/g	07/25/12 16:04	15065-10-8	
Uranium-235	EPA 901.1m	**0.158 ± 0.239 (0.440)**	pCi/g	07/25/12 16:04	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: L1447
Pace Project No.: 3072462

QC Batch: RADC/12540 Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3072462001, 3072462002

METHOD BLANK: 460418 Matrix: Solid
Associated Lab Samples: 3072462001, 3072462002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Actinium-228	-0.035 ± 0.0900 (0.173)	pCi/g	07/25/12 17:16	
Bismuth-212	-0.125 ± 0.410 (0.758)	pCi/g	07/25/12 17:16	
Bismuth-214	-0.046 ± 0.184 (0.356)	pCi/g	07/25/12 17:16	
Lead-212	0.0390 ± 0.0390 (0.0780)	pCi/g	07/25/12 17:16	
Lead-214	-0.004 ± 0.0570 (0.110)	pCi/g	07/25/12 17:16	
Potassium-40	-0.095 ± 0.329 (0.748)	pCi/g	07/25/12 17:16	
Radium-226	0.0220 ± 0.0580 (0.114)	pCi/g	07/25/12 17:16	
Radium-228	-0.035 ± 0.0900 (0.173)	pCi/g	07/25/12 17:16	
Thallium-208	-0.008 ± 0.0270 (0.0530)	pCi/g	07/25/12 17:16	
Thorium-234	0.276 ± 1.74 (3.08)	pCi/g	07/25/12 17:16	
Uranium-235	0.102 ± 0.143 (0.282)	pCi/g	07/25/12 17:16	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: L1447
Pace Project No.: 3072462

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 6/27/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY, CLEAR, 77°F

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PERSONAL PROTECTIVE EQUIPMENT.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: TRAVEL TO EME SITE, NEW EGYPT, NJ TO COLLECT (1) ONE COMMON FILL SAMPLE AND (1) ONE TOPSOIL SAMPLE.

Description of Chemical Data Acquisition Work Performed: TCL/TAL TO INCLUDE: VOC, SVOC, PESTICIDES, PCB, METALS, CYANIDE AND RADIOLOGICAL.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEM LABORATORY VIA FED EX.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/27/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?		X		
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?		X		

Notes/Comments

QC Inspector Name and Signature

6/27/12 ERIC TSCHUDI

Date

6/27/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/27/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

6/27/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/27/12

☐ / **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

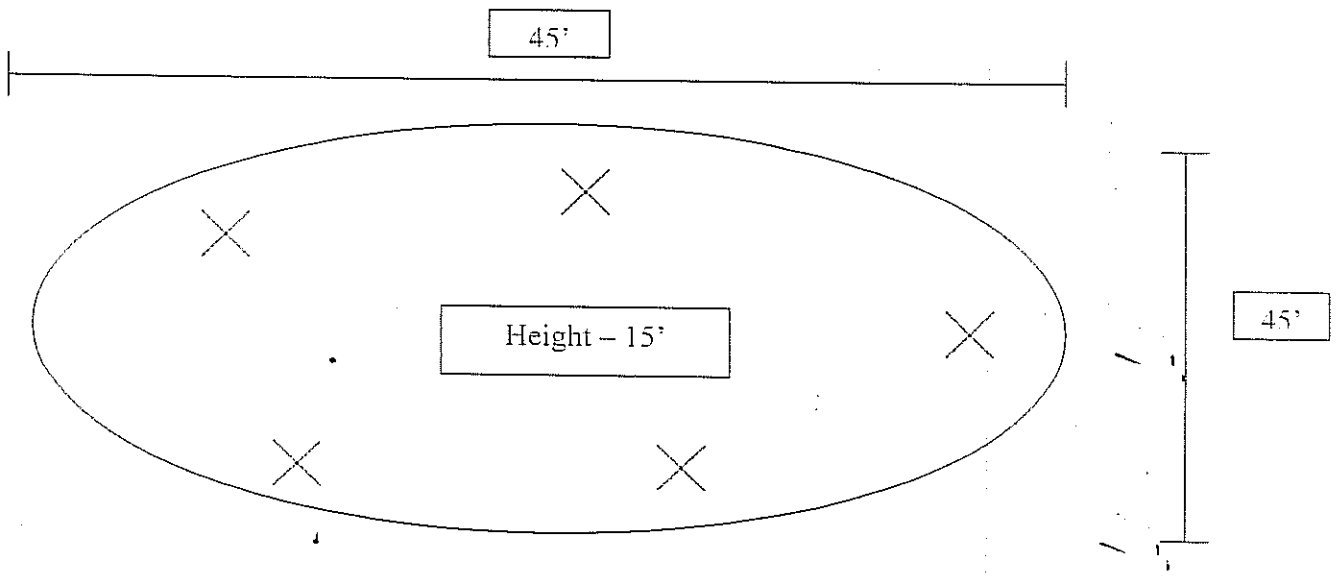
Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	6/27/12
CQC Systems Manager	[illegible]	[illegible]	6.27.12

EME Top Soil

Sampled: 6/272012

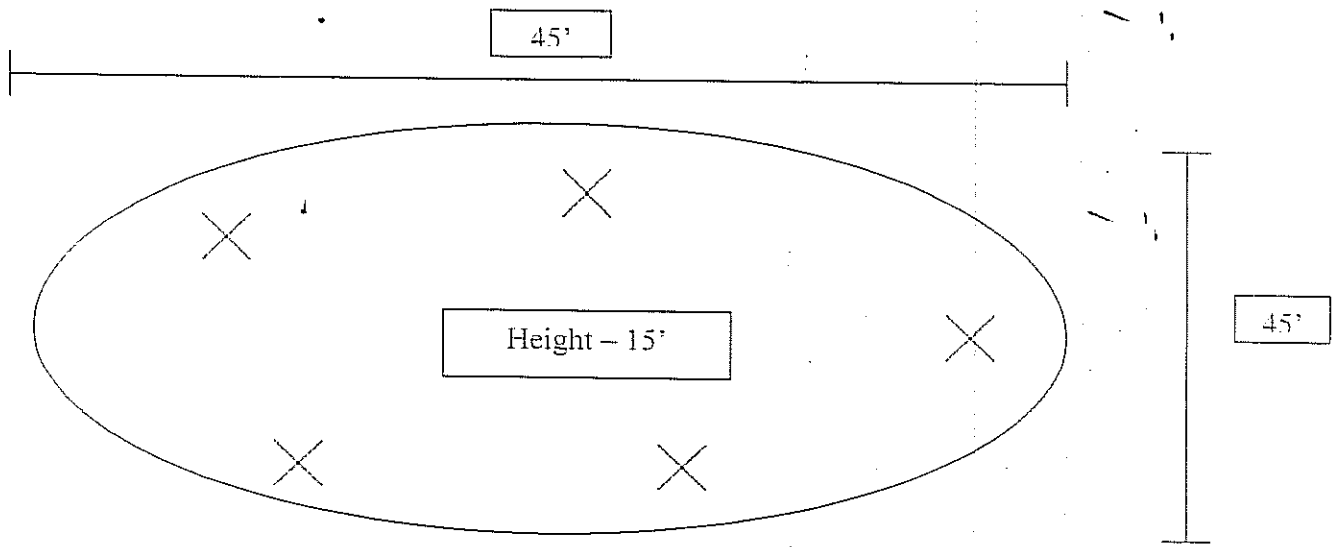


Ludlum 2221 Gamma Meter with 4410 probe used to measure radiological activity of stockpile. Radiological count background was measured at ~ 8.2 μR/hr, stockpile radiological count ranged from 6.7-8.5 μR/hr, and one minute radiological count was 8.4 μR/hr (obtained from location with the highest instantaneous Radiological count).

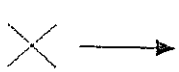
× → 5 discreet sample locations were composited and homogenized to represent the composition of the stockpile

EME Common Fill

Sampled: 6/272012



Ludlum 2221 Gamma Meter with 4410 probe used to measure radiological activity of stockpile. Radiological count background was measured at ~ 7.8 μR/hr, stockpile radiological count ranged from 6.7-8.5 μR/hr, and one minute radiological count was 6.8 μR/hr (obtained from location with the highest instantaneous Radiological count).



5 discreet sample locations were composited and homogenized to represent the composition of the stockpile

MITKEM LABORATORIES

A Division of SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 10 DAYS
All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
9087695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G2789001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI, W. ZAMBRANA

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

List preservative code below:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials (ENCORE)	# of Amber Glass	# of Clear Glass	# of Plastic	VOC	SVOC	PESTICIDES	PCB	METALS	CYANIDE	RADIOLOGICAL		
	CDESS-COMFILL-001	6/27/12	1030	G	SO	3		2		X	X	X	X	X	X	X		
	TOPSOIL-001	6/27/12	1040	G	SO	3		2		X	X	X	X	X	X	X		

☐ E-mail to KLICKFIELD@SEVENSON.COM

EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FEDEX	6/27/12	1700

FedEx InSight ®

Shipment Detail

Tracking Number
793729649447

Shipment Information

Status	On FedEx vehicle for delivery, WARWICK, RI
Ship (P/U) Date	06/27/2012
Est. Delivery Date	06/28/2012
Service Type	FedEx Priority Overnight
Number of Pieces	1
Weight	20 lb.

Shipper

Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd
South Plainfield, NJ 07080
US
9087695301

Shipment Reference

Reference Type	Description
Reference	Sevenson
Purchase Order Number	Cornell

Recipient

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD
WARWICK, RI 02886
US
4017323400

Associated Shipments | Shipment Description | Tracking Results

Associated Tracking Numbers

All Statuses

No Results Found

This is your default tab

Use of FedEx InSight is subject to the terms of the FedEx InSight Agreement. Included in that agreement are important disclaimers of warranties, limitations of liability, and provisions regarding indemnification, confidentiality, and permitted use of InSight. InSight does not amend, modify or alter the FedEx contract of carriage in any way, including declared value of limitations and Money-Back Guarantees. Please see the InSight Agreement for the terms and conditions applicable to InSight.

All weights are estimated. Shipments delayed because of Customs or other regulatory delays are not subject to refund or credit under the FedEx Money-Back Guarantee

+ Delivered on an IPD or IDF master air waybill means 'the shipment has been released for delivery'.

For more information, you may also contact your FedEx Representative or contact Customer Support

This site is protected by copyright and trademark laws under U.S. and International law. All rights reserved © 1995-2012 FedEx.

COMPACTION TEST REPORT

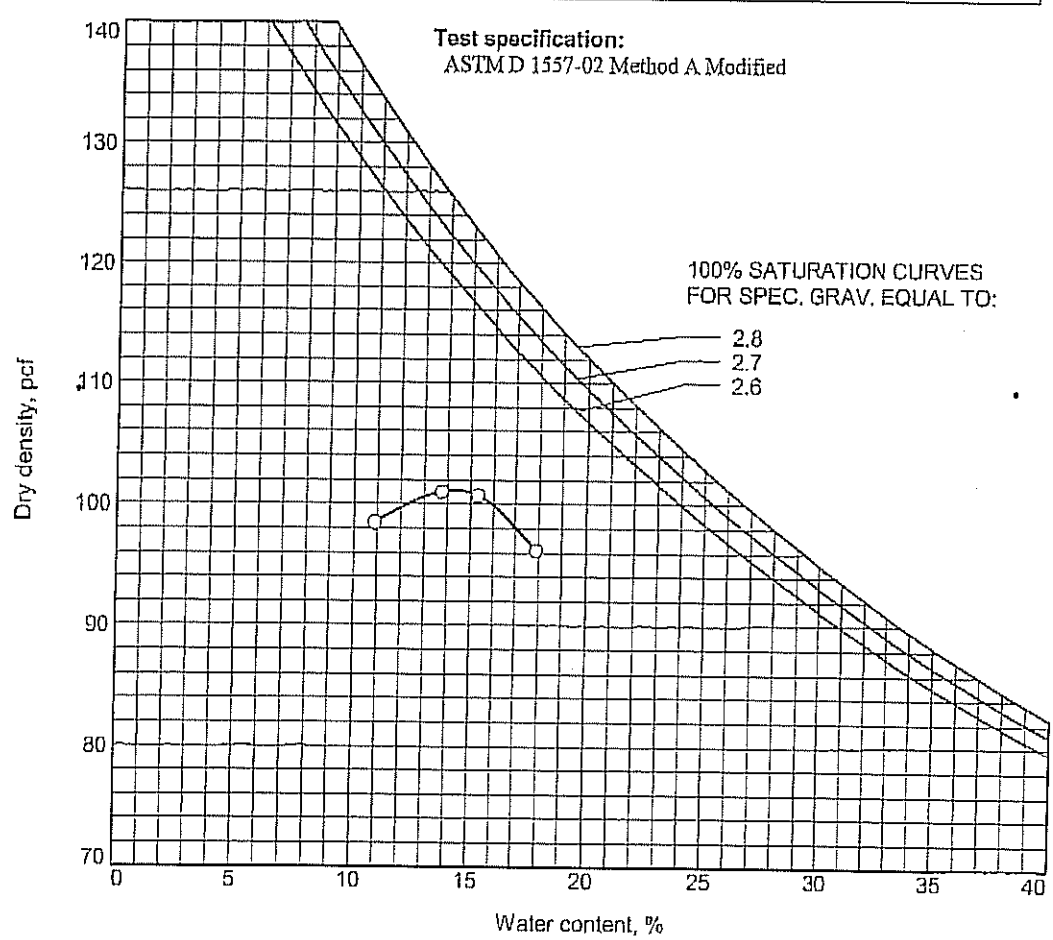
Project No.:
Date: 6/27/2012
Project: Cornell Dublier Superfund Site OU1
Client: Sevenson Environmental Services, INC
Location: EME
Sample Number: 535
Remarks:

MATERIAL DESCRIPTION

Description: Common Fill

Classifications - USCS: AASHTO:
Nat. Moist. = Sp.G. =
Liquid Limit = Plasticity Index =
% < No.200 = 10.7 %

TEST RESULTS
Maximum dry density = 101.1 pcf
Optimum moisture = 14.3 %

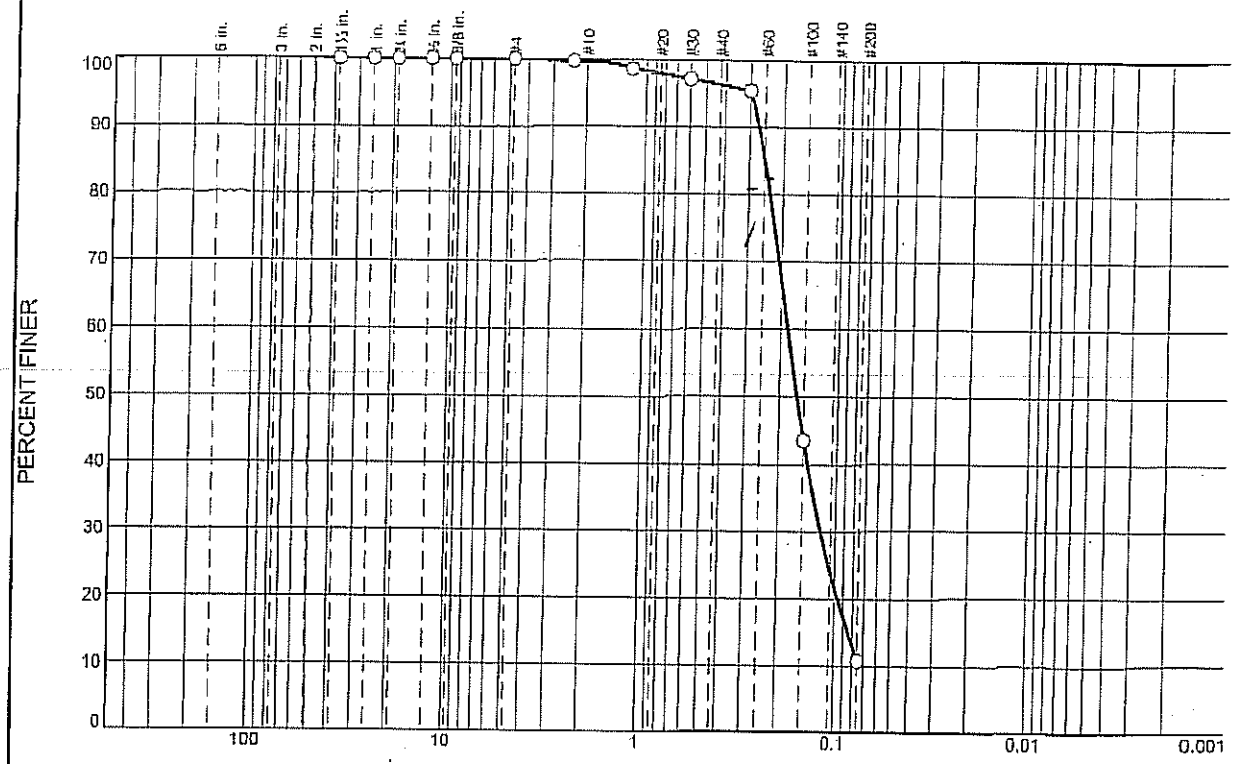


Figure

Nova Engineering & Environmental

Tested By: N Patel Checked By: C Patel

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	3.5	85.6	10.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
#4	100.0		
#8	99.8		
#16	98.7		
#30	97.2		
#50	95.4		
#100	43.5		
#200	10.7		

* (no specification provided)

Material Description

Common Fill

Atterberg Limits

PL= NP LL= PI=

Coefficients

D_{90}= 0.2700 D_{85}= 0.2502 D_{60}= 0.1841
D_{50}= 0.1633 D_{30}= 0.1207 D_{15}= 0.0849
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Natural Moisture: 9.9 %
Plasticity Index: NP

Location: EME
Sample Number: 535

Date: 6/27/2012

Nova Engineering & Environmental Newark, NJ

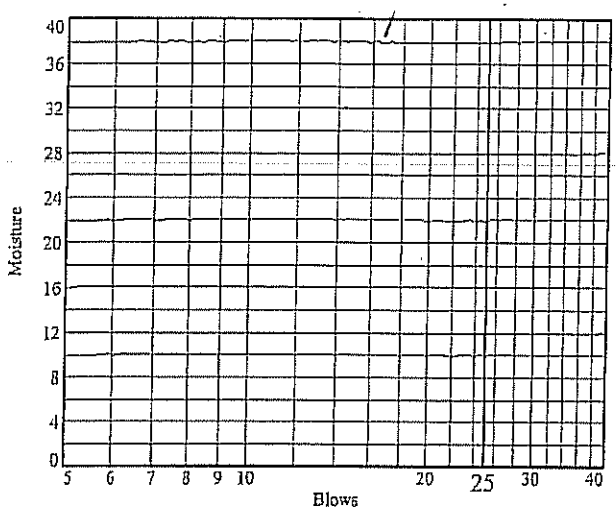
Client: Sevenson Environmental Services, INC
Project: Cornell Dublier Superfund Site OU1
Project No: Figure

Tested By: N Patel Checked By: C Patel

LIQUID AND PLASTIC LIMIT TEST DATA

7/25/2012

Client: Sevenson Environmental Services, INC
Project: Cornell Dublier Superfund Site OU1
Location: EME
Sample Number: 535
Material Description: Common Fill



Liquid Limit= _____
Plastic Limit= NP
Plasticity Index= _____

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare					
Dry+Tare					
Tare					
Moisture					

COMPACTION TEST REPORT

Project No.:
Project: Cornell Dublier Superfund Site OU1
Client: Sevenson Environmental Services, INC
Location: EME
Sample Number: 534
Remarks:

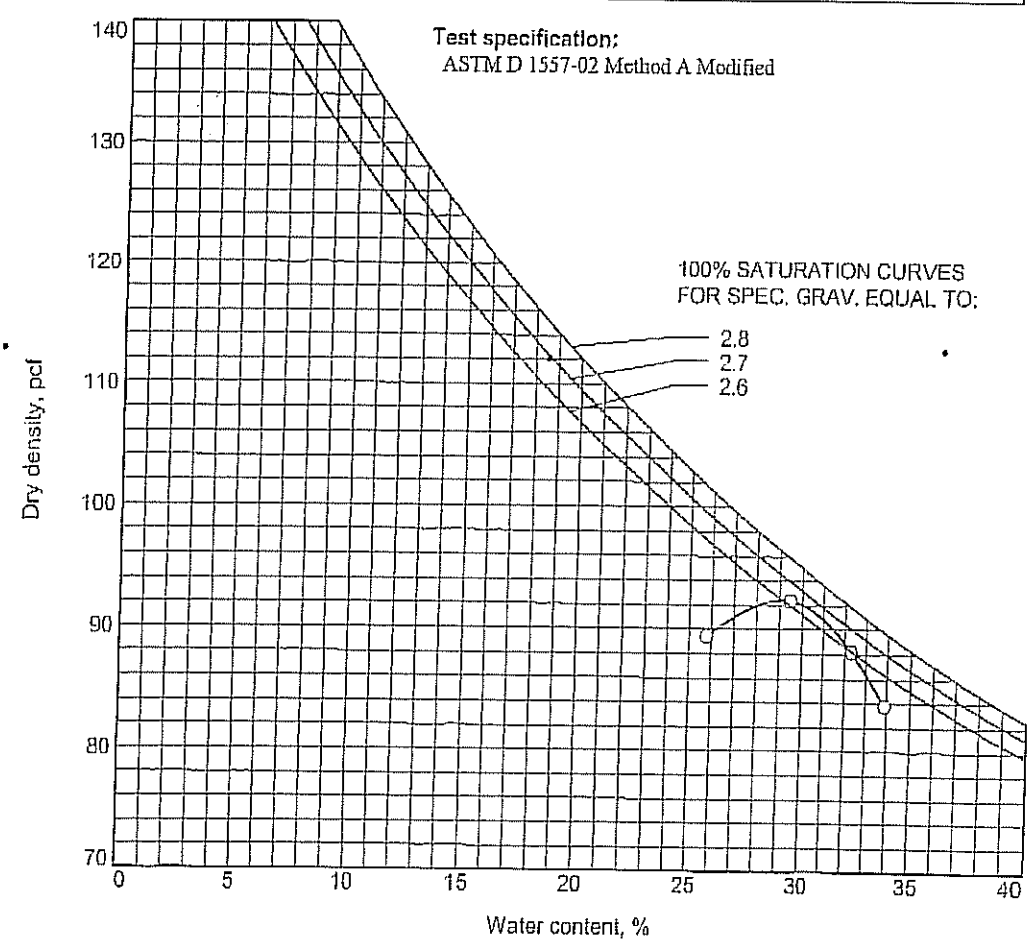
Date: 06/27/2012

MATERIAL DESCRIPTION

Description: Top Soil

Classifications - USCS: SC-SM AASHTO: A-2-4(0)
Nat. Moist. = Sp.G. =
Liquid Limit = 12 Plasticity Index = 4
% < No.200 = 29.8 %

TEST RESULTS
Maximum dry density = 92.4 pcf
Optimum moisture = 29.1 %

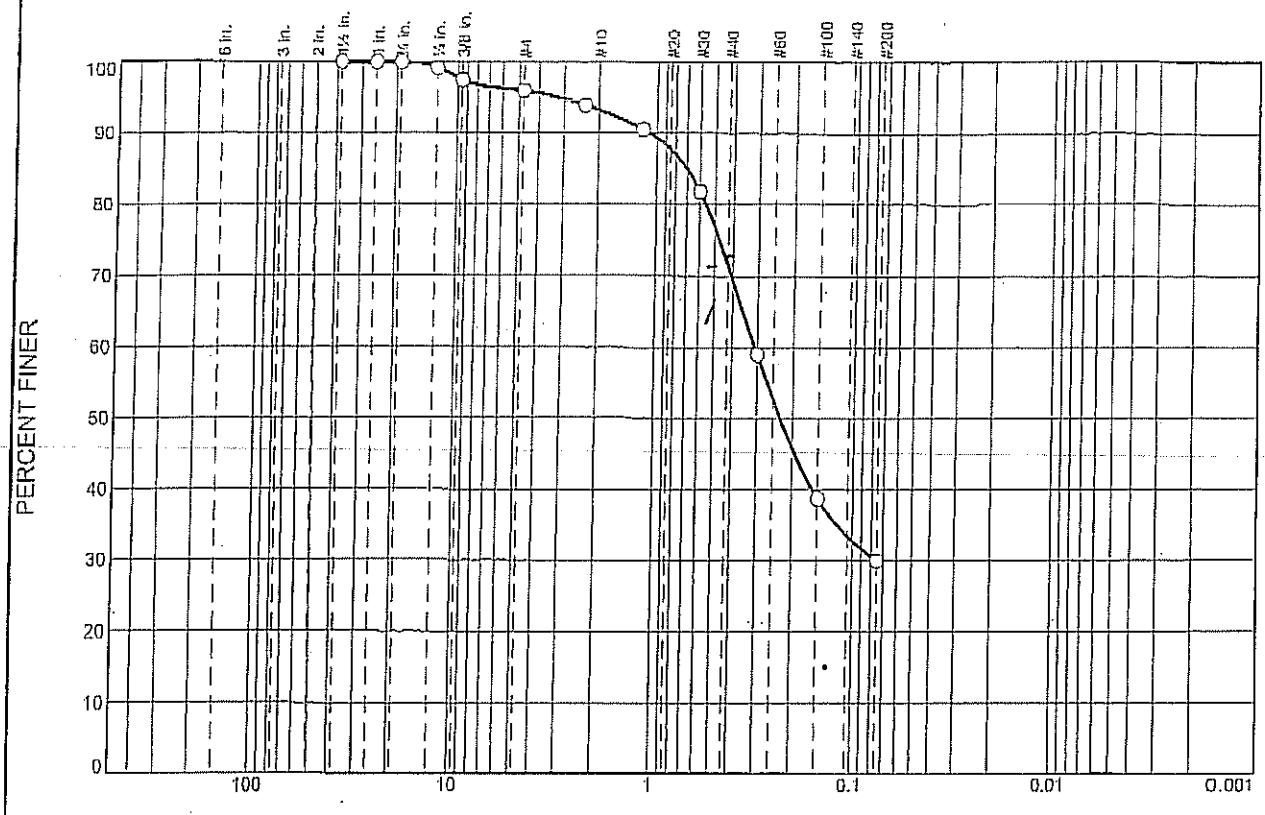


Figure

Nova Engineering & Environmental

Tested By: N Patel Checked By: C Patel

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.0	2.8	21.8	41.6	29.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	100.0		
.75	100.0		
.5	99.2		
.375	97.5		
#4	96.0		
#8	93.9		
#16	90.5		
#30	81.8		
#50	58.9		
#100	38.6		
#200	29.8		

* (no specification provided)

Material Description

Top Soil

Atterberg Limits

PL= 8 LL= 12 PI= 4

Coefficients

D_{90}= 1.0964 D_{85}= 0.7024 D_{60}= 0.3096
D_{50}= 0.2309 D_{30}= 0.0767 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Natural MOisutre: 28.5%
Organic Content: 9.8%
PH: 6.5

Location: EME
Sample Number: 534

Date: 06/27/2012

Nova Engineering & Environmental
Newark, NJ

Client: Sevenson Environmental Services, INC
Project: Cornell Dublier Superfund Site OU1

Project No: Figure

Tested By: N Patel Checked By: C Patel

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 08/09/2012

TRANSMITTAL NO.: 02320-52

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [ ] FIO [X] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
2	Common Fill -Topsoil Analytical Test-EME	TEST REPORTS	2	1.6		A	N	

REMARKS
Passed Radilogical and Chemical Testing
Topsoil pased PH and organics
Common Fill passed sieve test

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: CDESS-Comfill-001; CDESS-Topsoil-001
Prepared By: Ken Paisley
CC: Kim Lickfield
Date: 08/09/12

Waste Determination (if applicable): N/A (Site Backfill)

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to Site ROD criteria and the site-specific Sampling and Analysis Plan. The analyses performed are of acceptable data quality.

Analytical results from the sample event were compared against RDCSCC and Project Action Limit (IGWSCC NJAC 7:26 "Clean Soil Criteria") to identify exceedances. The sample did not exceed the Site criteria*.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that I have reviewed the data and find it to be as presented above.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

RADIOLOGICAL DATA

Sample ID	Nuclide Reported by Gamma Spec	Nuclide Of Interest (NJAC 7:28-12)	Result (pCi/g)	Project Action Limit (pCi/g)
CDESS-COMFILL-001	Actinium - 228	Th - 232	0.558	2
CDESS-COMFILL-001	Bismuth - 214	Ra - 226	1.05	2
CDESS-COMFILL-001	Lead - 214	Ra - 226	0.207	2
CDESS-COMFILL-001	Thorium - 234	U - 238	2.34	14
CDESS-TOPSOIL-001	Actinium - 228	Th - 232	0.487	2
CDESS-TOPSOIL-001	Bismuth - 214	Ra - 226	0.702	2
CDESS-TOPSOIL-001	Lead - 214	Ra - 226	0.576	2
CDESS-TOPSOIL-001	Thorium - 234	U - 238	2.17	14

Report Date:
26-Jul-12 16:54

☑ Final Report
Re-Issued Report
Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: L1447
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L1447-01	CDESS-COMFILL-001	Soil	27-Jun-12 10:30	28-Jun-12 08:55
L1447-02	CDESS-TOPSOIL-001	Soil	27-Jun-12 10:40	28-Jun-12 08:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01B

Sample wt/vol: 4.60 (g/mL) G Lab File ID: V1M7567.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 10 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	6.0	U
67-64-1	Acetone	6.0	U
75-15-0	Carbon disulfide	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
78-93-3	2-Butanone	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
107-06-2	1,2-Dichloroethane	6.0	U
71-43-2	Benzene	6.0	U
79-01-6	Trichloroethene	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-88-3	Toluene	6.0	U
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
127-18-4	Tetrachloroethene	6.0	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	6.0	U
100-41-4	Ethylbenzene	6.0	U
1330-20-7	Xylene (Total)	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01B

Sample wt/vol: 4.60 (g/mL) G Lab File ID: V1M7567.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 10 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
107-02-8	Acrolein	30	U
107-13-1	Acrylonitrile	6.0	U
79-20-9	Methyl acetate	6.0	U
75-65-0	tert-Butyl Alcohol	12	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02B

Sample wt/vol: 5.40 (g/mL) G Lab File ID: V1M7568.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 24 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	6.1	U
74-87-3	Chloromethane	6.1	U
75-01-4	Vinyl chloride	6.1	U
74-83-9	Bromomethane	6.1	U
75-00-3	Chloroethane	6.1	U
75-69-4	Trichlorofluoromethane	6.1	U
75-35-4	1,1-Dichloroethene	6.1	U
67-64-1	Acetone	6.1	U
75-15-0	Carbon disulfide	6.1	U
75-09-2	Methylene chloride	6.1	U
156-60-5	trans-1,2-Dichloroethene	6.1	U
1634-04-4	Methyl tert-butyl ether	6.1	U
75-34-3	1,1-Dichloroethane	6.1	U
78-93-3	2-Butanone	6.1	U
156-59-2	cis-1,2-Dichloroethene	6.1	U
67-66-3	Chloroform	6.1	U
71-55-6	1,1,1-Trichloroethane	6.1	U
56-23-5	Carbon tetrachloride	6.1	U
107-06-2	1,2-Dichloroethane	6.1	U
71-43-2	Benzene	6.1	U
79-01-6	Trichloroethene	6.1	U
78-87-5	1,2-Dichloropropane	6.1	U
75-27-4	Bromodichloromethane	6.1	U
10061-01-5	cis-1,3-Dichloropropene	6.1	U
108-88-3	Toluene	6.1	U
10061-02-6	trans-1,3-Dichloropropene	6.1	U
79-00-5	1,1,2-Trichloroethane	6.1	U
127-18-4	Tetrachloroethene	6.1	U
124-48-1	Dibromochloromethane	6.1	U
106-93-4	1,2-Dibromoethane	6.1	U
108-90-7	Chlorobenzene	6.1	U
100-41-4	Ethylbenzene	6.1	U
1330-20-7	Xylene (Total)	6.1	U
100-42-5	Styrene	6.1	U
75-25-2	Bromoform	6.1	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDESS-TOPSOIL-00
1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02B

Sample wt/vol: 5.40 /(g/mL) G Lab File ID: V1M7568.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/28/2012

% Moisture: not dec. 24 Date Analyzed: 07/02/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U
541-73-1	1,3-Dichlorobenzene	6.1	U
106-46-7	1,4-Dichlorobenzene	6.1	U
95-50-1	1,2-Dichlorobenzene	6.1	U
96-12-8	1,2-Dibromo-3-chloropropane	6.1	U
120-82-1	1,2,4-Trichlorobenzene	6.1	U
107-02-8	Acrolein	31	U
107-13-1	Acrylonitrile	6.1	U
79-20-9	Methyl acetate	6.1	U
75-65-0	tert-Butyl Alcohol	12	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S3I1195.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	180	U
111-44-4	Bis(2-chloroethyl)ether	180	U
95-57-8	2-Chlorophenol	180	U
95-48-7	2-Methylphenol	180	U
106-44-5	4-Methylphenol	180	U
621-64-7	N-Nitroso-di-n-propylamine	180	U
67-72-1	Hexachloroethane	180	U
98-95-3	Nitrobenzene	180	U
78-59-1	Isophorone	180	U
105-67-9	2,4-Dimethylphenol	180	U
120-83-2	2,4-Dichlorophenol	180	U
91-20-3	Naphthalene	180	U
87-68-3	Hexachlorobutadiene	180	U
91-57-6	2-Methylnaphthalene	180	U
77-47-4	Hexachlorocyclopentadiene	180	U
88-06-2	2,4,6-Trichlorophenol	180	U
95-95-4	2,4,5-Trichlorophenol	370	U
88-74-4	2-Nitroaniline	370	U
208-96-8	Acenaphthylene	180	U
606-20-2	2,6-Dinitrotoluene	180	U
83-32-9	Acenaphthene	180	U
51-28-5	2,4-Dinitrophenol	370	U
121-14-2	2,4-Dinitrotoluene	180	U
84-66-2	Diethylphthalate	180	U
86-73-7	Fluorene	180	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	N-Nitrosodiphenylamine	180	U
118-74-1	Hexachlorobenzene	180	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	180	U
120-12-7	Anthracene	180	U
86-74-8	Carbazole	180	U
84-74-2	Di-n-butylphthalate	180	U
206-44-0	Fluoranthene	180	U
129-00-0	Pyrene	180	U
85-68-7	Butylbenzylphthalate	180	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-00 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S3I1195.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	180	U
56-55-3	Benzo(a)anthracene	180	U
218-01-9	Chrysene	180	U
117-81-7	Bis(2-ethylhexyl)phthalate	46	J
117-84-0	Di-n-octylphthalate	180	U
205-99-2	Benzo(b)fluoranthene	180	U
207-08-9	Benzo(k)fluoranthene	180	U
50-32-8	Benzo(a)pyrene	180	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	U
53-70-3	Dibenzo(a,h)anthracene	180	U
191-24-2	Benzo(g,h,i)perylene	180	U
92-52-4	1,1'-Biphenyl	180	U
98-86-2	Acetophenone	180	U
1912-24-9	Atrazine	180	U
103-33-3	Azobenzene	180	U
100-52-7	Benzaldehyde	180	U
92-87-5	Benzidine	180	U
39638-32-9	Bis(2-chloroisopropyl)ether	180	U
105-60-2	Caprolactam	180	U
62-75-9	N-Nitrosodimethylamine	180	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S3I1196.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
95-48-7	2-Methylphenol	210	U
106-44-5	4-Methylphenol	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
105-67-9	2,4-Dimethylphenol	210	U
120-83-2	2,4-Dichlorophenol	210	U
91-20-3	Naphthalene	210	U
87-68-3	Hexachlorobutadiene	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	210	U
95-95-4	2,4,5-Trichlorophenol	430	U
88-74-4	2-Nitroaniline	430	U
208-96-8	Acenaphthylene	210	U
606-20-2	2,6-Dinitrotoluene	210	U
83-32-9	Acenaphthene	210	U
51-28-5	2,4-Dinitrophenol	430	U
121-14-2	2,4-Dinitrotoluene	210	U
84-66-2	Diethylphthalate	210	U
86-73-7	Fluorene	210	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	N-Nitrosodiphenylamine	210	U
118-74-1	Hexachlorobenzene	210	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
86-74-8	Carbazole	210	U
84-74-2	Di-n-butylphthalate	210	U
206-44-0	Fluoranthene	51	J
129-00-0	Pyrene	51	J
85-68-7	Butylbenzylphthalate	45	J

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S3I1196.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Concentrated Extract Volume: 500 (uL) Date Extracted: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 07/06/2012

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	210	U
56-55-3	Benzo(a)anthracene	210	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	62	J
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	210	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	210	U
191-24-2	Benzo(g,h,i)perylene	210	U
92-52-4	1,1'-Biphenyl	210	U
98-86-2	Acetophenone	210	U
1912-24-9	Atrazine	210	U
103-33-3	Azobenzene	210	U
100-52-7	Benzaldehyde	210	U
92-87-5	Benzidine	210	U
39638-32-9	Bis(2-chloroisopropyl)ether	210	U
105-60-2	Caprolactam	210	U
62-75-9	N-Nitrosodimethylamine	210	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-00 1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 30.0 (g/mL) G / Lab File ID: E5H9500F.D/E5H9500R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: / 30.5 (g/mL) G Lab File ID: E5H9501F.D/E5H9501R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/05/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2L1854F.D/E2L1854R.D

% Moisture: 10 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/03/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1447 Mod. Ref No.: SDG No.: SL1447

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1447-02A

Sample wt/vol: 30.5 (g/mL) g Lab File ID: E2L1855F.D/E2L1855R.D

% Moisture: 24 Decanted: (Y/N) N Date Received: 06/28/2012

Extraction: (Type) SONC Date Extracted: 06/29/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/03/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-COMFILL-001

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1447

Matrix (soil/water): SOIL Lab Sample ID: L1447-01

Level (low/med): MED Date Received: 06/28/2012

% Solids: 90.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1320			P
7440-36-0	Antimony	0.39	U		P
7440-38-2	Arsenic	0.83	B		P
7440-39-3	Barium	4.6	B		P
7440-41-7	Beryllium	0.0015	U		P
7440-43-9	Cadmium	0.53			P
7440-47-3	Chromium	6.5			P
7440-48-4	Cobalt	0.36	B		P
7440-50-8	Copper	1.1	B		P
7439-92-1	Lead	3.3			P
7439-96-5	Manganese	3.0			P
7439-97-6	Mercury	0.017	B		CV
7440-02-0	Nickel	1.3	B		P
7782-49-2	Selenium	0.73	B		P
7440-22-4	Silver	0.11	B		P
7440-28-0	Thallium	0.28	B		P
7440-62-2	Vanadium	5.4			P
7440-66-6	Zinc	2.6	B		P
57-12-5	Cyanide	0.50	U		CA

Comments:

Hm11.12.12.A

FORM I - IN SW846

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDESS-TOPSOIL-001

Lab Name: Spectrum Analytical, Inc. Contract: G2789001

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1447

Matrix (soil/water): SOIL Lab Sample ID: L1447-02

Level (low/med): MED Date Received: 06/28/2012

% Solids: 75.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5150			P
7440-36-0	Antimony	0.53	B		P
7440-38-2	Arsenic	5.3			P
7440-39-3	Barium	33.4			P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	0.13	B		P
7440-47-3	Chromium	11.9			P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	9.5			P
7439-92-1	Lead	18.9			P
7439-96-5	Manganese	215			P
7439-97-6	Mercury	0.023	B		CV
7440-02-0	Nickel	4.0			P
7782-49-2	Selenium	0.75	U		P
7440-22-4	Silver	0.075	U		P
7440-28-0	Thallium	0.26	U		P
7440-62-2	Vanadium	17.1			P
7440-66-6	Zinc	28.3			P
57-12-5	Cyanide	0.57	U		CA

Comments:

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: L1447
Pace Project No.: 3072462

Sample: CDESS-COMFILL-001 Lab ID: 3072462001 Collected: 06/27/12 10:30 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	0.558 ± 0.252 (0.185)	pCi/g	07/25/12 15:02	14331-83-0	
Bismuth-212	EPA 901.1m	1.05 ± 0.628 (0.709)	pCi/g	07/25/12 15:02	14913-49-6	
Bismuth-214	EPA 901.1m	1.05 ± 0.160 (0.577)	pCi/g	07/25/12 15:02	14733-03-0	
Lead-212	EPA 901.1m	0.207 ± 0.153 (0.143)	pCi/g	07/25/12 15:02	15092-94-1	
Lead-214	EPA 901.1m	1.02 ± 0.208 (0.131)	pCi/g	07/25/12 15:02	15067-28-4	
Potassium-40	EPA 901.1m	5.91 ± 1.07 (0.486)	pCi/g	07/25/12 15:02	13966-00-2	
Radium-226	EPA 901.1m	1.11 ± 0.190 (0.347)	pCi/g	07/25/12 15:02	13982-63-3	
Radium-228	EPA 901.1m	0.558 ± 0.252 (0.185)	pCi/g	07/25/12 15:02	15262-20-1	
Thallium-208	EPA 901.1m	0.157 ± 0.0620 (0.0610)	pCi/g	07/25/12 15:02	14913-50-9	
Thorium-234	EPA 901.1m	2.34 ± 2.71 (4.70)	pCi/g	07/25/12 15:02	15065-10-8	
Uranium-235	EPA 901.1m	0.0720 ± 0.226 (0.409)	pCi/g	07/25/12 15:02	15117-96-1	

Sample: CDESS-TOPSOIL-001 Lab ID: 3072462002 Collected: 06/27/12 10:40 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	0.487 ± 0.217 (0.202)	pCi/g	07/25/12 16:04	14331-83-0	
Bismuth-212	EPA 901.1m	0.859 ± 0.653 (0.928)	pCi/g	07/25/12 16:04	14913-49-6	
Bismuth-214	EPA 901.1m	0.702 ± 0.409 (0.862)	pCi/g	07/25/12 16:04	14733-03-0	
Lead-212	EPA 901.1m	0.851 ± 0.160 (0.104)	pCi/g	07/25/12 16:04	15092-94-1	
Lead-214	EPA 901.1m	0.576 ± 0.184 (0.273)	pCi/g	07/25/12 16:04	15067-28-4	
Potassium-40	EPA 901.1m	7.49 ± 1.29 (0.529)	pCi/g	07/25/12 16:04	13966-00-2	
Radium-226	EPA 901.1m	0.551 ± 0.110 (0.160)	pCi/g	07/25/12 16:04	13982-63-3	
Radium-228	EPA 901.1m	0.487 ± 0.217 (0.202)	pCi/g	07/25/12 16:04	15262-20-1	
Thallium-208	EPA 901.1m	0.151 ± 0.0740 (0.121)	pCi/g	07/25/12 16:04	14913-50-9	
Thorium-234	EPA 901.1m	2.17 ± 2.90 (5.03)	pCi/g	07/25/12 16:04	15065-10-8	
Uranium-235	EPA 901.1m	0.158 ± 0.239 (0.440)	pCi/g	07/25/12 16:04	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: L1447
Pace Project No.: 3072462

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3072462001	CDESS-COMFILL-001	Solid	06/27/12 10:30	06/29/12 10:10
3072462002	CDESS-TOPSOIL-001	Solid	06/27/12 10:40	06/29/12 10:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

July 26, 2012

Ms. Agnes Huntley
Spectrum Analytical, Featuring Hanibal Technology
175 Metro Center Blvd
Warwick, RI 02886

RE: Project: L1447
Pace Project No.: 3072462

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on June 29, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report reissued on 7/26/12 to reflect results after the ingrowth period was completed.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: L1447
Pace Project No.: 3072462

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Virginia VELAP (Cert # 460198)
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: L1447
Pace Project No.: 3072462

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3072462001	CDESS-COMFILL-001	Solid	06/27/12 10:30	06/29/12 10:10
3072462002	CDESS-TOPSOIL-001	Solid	06/27/12 10:40	06/29/12 10:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: L1447
Pace Project No.: 3072462

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3072462001	CDESS-COMFILL-001	EPA 901.1m	AEH	11
3072462002	CDESS-TOPSOIL-001	EPA 901.1m	AEH	11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: L1447
Pace Project No.: 3072462

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: July 26, 2012

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: L1447
Pace Project No.: 3072462

Sample: CDESS-COMFILL-001 Lab ID: **3072462001** Collected: 06/27/12 10:30 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.558 ± 0.252 (0.185)**	pCi/g	07/25/12 15:02	14331-83-0	
Bismuth-212	EPA 901.1m	**1.05 ± 0.628 (0.709)**	pCi/g	07/25/12 15:02	14913-49-6	
Bismuth-214	EPA 901.1m	**1.05 ± 0.160 (0.577)**	pCi/g	07/25/12 15:02	14733-03-0	
Lead-212	EPA 901.1m	**0.207 ± 0.153 (0.143)**	pCi/g	07/25/12 15:02	15092-94-1	
Lead-214	EPA 901.1m	**1.02 ± 0.208 (0.131)**	pCi/g	07/25/12 15:02	15067-28-4	
Potassium-40	EPA 901.1m	**5.91 ± 1.07 (0.486)**	pCi/g	07/25/12 15:02	13966-00-2	
Radium-226	EPA 901.1m	**1.11 ± 0.190 (0.347)**	pCi/g	07/25/12 15:02	13982-63-3	
Radium-228	EPA 901.1m	**0.558 ± 0.252 (0.185)**	pCi/g	07/25/12 15:02	15262-20-1	
Thallium-208	EPA 901.1m	**0.157 ± 0.0620 (0.0610)**	pCi/g	07/25/12 15:02	14913-50-9	
Thorium-234	EPA 901.1m	**2.34 ± 2.71 (4.70)**	pCi/g	07/25/12 15:02	15065-10-8	
Uranium-235	EPA 901.1m	**0.0720 ± 0.226 (0.409)**	pCi/g	07/25/12 15:02	15117-96-1	

Sample: CDESS-TOPSOIL-001 Lab ID: **3072462002** Collected: 06/27/12 10:40 Received: 06/29/12 10:10 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.487 ± 0.217 (0.202)**	pCi/g	07/25/12 16:04	14331-83-0	
Bismuth-212	EPA 901.1m	**0.859 ± 0.653 (0.928)**	pCi/g	07/25/12 16:04	14913-49-6	
Bismuth-214	EPA 901.1m	**0.702 ± 0.409 (0.862)**	pCi/g	07/25/12 16:04	14733-03-0	
Lead-212	EPA 901.1m	**0.851 ± 0.160 (0.104)**	pCi/g	07/25/12 16:04	15092-94-1	
Lead-214	EPA 901.1m	**0.576 ± 0.184 (0.273)**	pCi/g	07/25/12 16:04	15067-28-4	
Potassium-40	EPA 901.1m	**7.49 ± 1.29 (0.529)**	pCi/g	07/25/12 16:04	13966-00-2	
Radium-226	EPA 901.1m	**0.551 ± 0.110 (0.160)**	pCi/g	07/25/12 16:04	13982-63-3	
Radium-228	EPA 901.1m	**0.487 ± 0.217 (0.202)**	pCi/g	07/25/12 16:04	15262-20-1	
Thallium-208	EPA 901.1m	**0.151 ± 0.0740 (0.121)**	pCi/g	07/25/12 16:04	14913-50-9	
Thorium-234	EPA 901.1m	**2.17 ± 2.90 (5.03)**	pCi/g	07/25/12 16:04	15065-10-8	
Uranium-235	EPA 901.1m	**0.158 ± 0.239 (0.440)**	pCi/g	07/25/12 16:04	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: L1447
Pace Project No.: 3072462

QC Batch: RADC/12540 Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3072462001, 3072462002

METHOD BLANK: 460418 Matrix: Solid
Associated Lab Samples: 3072462001, 3072462002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Actinium-228	-0.035 ± 0.0900 (0.173)	pCi/g	07/25/12 17:16	
Bismuth-212	-0.125 ± 0.410 (0.758)	pCi/g	07/25/12 17:16	
Bismuth-214	-0.046 ± 0.184 (0.356)	pCi/g	07/25/12 17:16	
Lead-212	0.0390 ± 0.0390 (0.0780)	pCi/g	07/25/12 17:16	
Lead-214	-0.004 ± 0.0570 (0.110)	pCi/g	07/25/12 17:16	
Potassium-40	-0.095 ± 0.329 (0.748)	pCi/g	07/25/12 17:16	
Radium-226	0.0220 ± 0.0580 (0.114)	pCi/g	07/25/12 17:16	
Radium-228	-0.035 ± 0.0900 (0.173)	pCi/g	07/25/12 17:16	
Thallium-208	-0.008 ± 0.0270 (0.0530)	pCi/g	07/25/12 17:16	
Thorium-234	0.276 ± 1.74 (3.08)	pCi/g	07/25/12 17:16	
Uranium-235	0.102 ± 0.143 (0.282)	pCi/g	07/25/12 17:16	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: L1447
Pace Project No.: 3072462

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 6/27/12

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: SUNNY, CLEAR, 77°F

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: MODIFIED LEVEL D PERSONAL PROTECTIVE EQUIPMENT.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: TRAVEL TO EME SITE, NEW EGYPT, NJ TO COLLECT (1) ONE COMMON FILL SAMPLE AND (1) ONE TOPSOIL SAMPLE.

Description of Chemical Data Acquisition Work Performed: TCL/TAL TO INCLUDE: VOC, SVOC, PESTICIDES, PCB, METALS, CYANIDE AND RADIOLOGICAL.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: SAMPLES SHIPPED TO MITKEM LABORATORY VIA FED EX.

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/27/12

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?		X		
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?		X		

Notes/Comments

QC Inspector Name and Signature

6/27/12 ERIC TSCHUDI

Date

6/27/12

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/27/12

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?			
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Date

6/27/12

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 6/27/12

☐ / **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☒ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

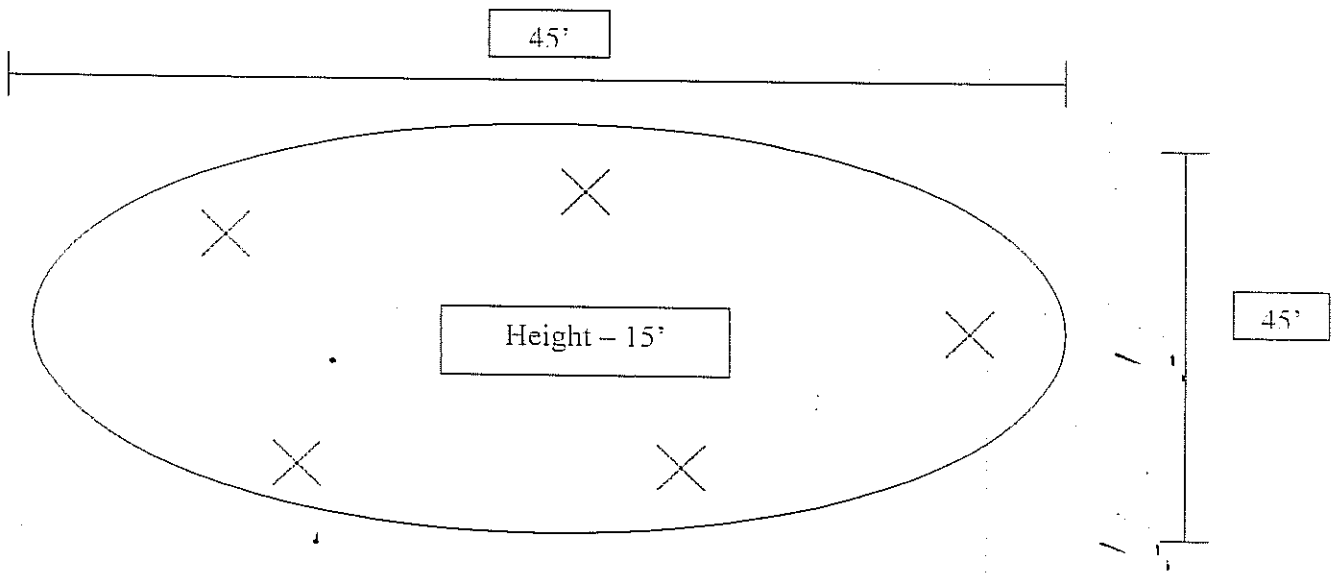
Comments: _____

Sevenson Project Manager _____

	Name	Signature	Date
QC Reviewer	ERIC TSCHUDI	[illegible]	6/27/12
CQC Systems Manager	[illegible]	[illegible]	6.27.12

EME Top Soil

Sampled: 6/272012

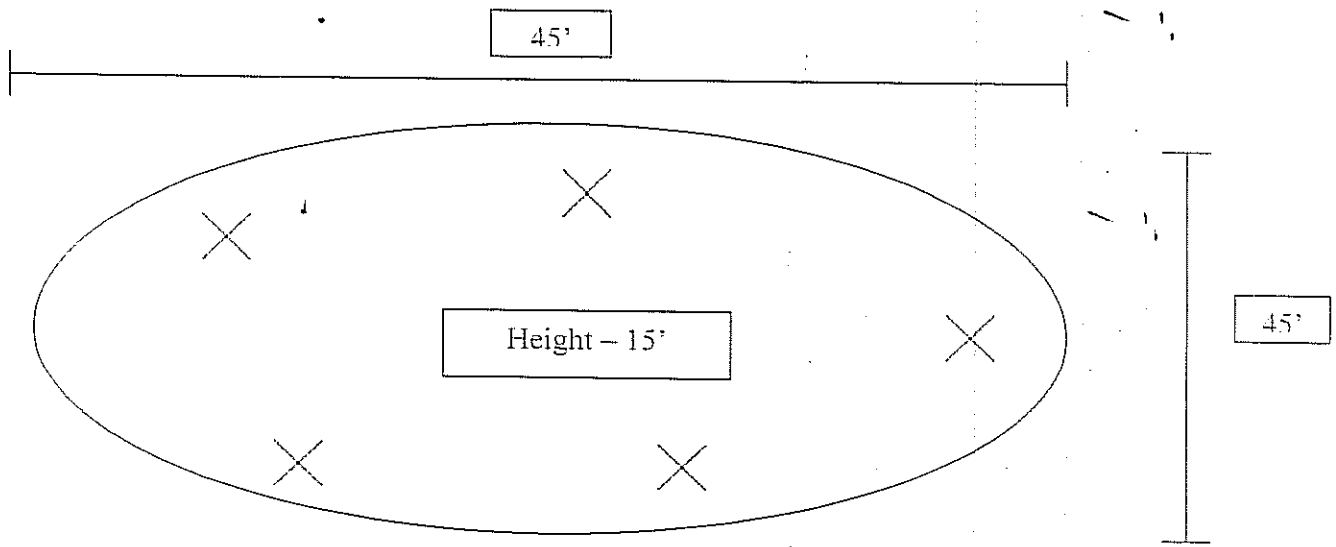


Ludlum 2221 Gamma Meter with 4410 probe used to measure radiological activity of stockpile. Radiological count background was measured at ~ 8.2 μR/hr, stockpile radiological count ranged from 6.7-8.5 μR/hr, and one minute radiological count was 8.4 μR/hr (obtained from location with the highest instantaneous Radiological count).

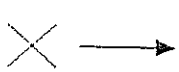
× → 5 discreet sample locations were composited and homogenized to represent the composition of the stockpile

EME Common Fill

Sampled: 6/272012



Ludlum 2221 Gamma Meter with 4410 probe used to measure radiological activity of stockpile. Radiological count background was measured at ~ 7.8 μR/hr, stockpile radiological count ranged from 6.7-8.5 μR/hr, and one minute radiological count was 6.8 μR/hr (obtained from location with the highest instantaneous Radiological count).



5 discreet sample locations were composited and homogenized to represent the composition of the stockpile

MITKEM LABORATORIES

A Division of SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 10 DAYS
All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
333 HAMILTON BLVD.
SOUTH PLAINFIELD, NJ 07080
9087695301

Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G2789001 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER ELECTRONICS
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI, W. ZAMBRANA

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

List preservative code below:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials (ENCORE)	# of Amber Glass	# of Clear Glass	# of Plastic	VOC	SVOC	PESTICIDES	PCB	METALS	CYANIDE	RADIOLOGICAL		
	CDESS-COMFILL-001	6/27/12	1030	G	SO	3		2		X	X	X	X	X	X	X		
	TOPSOIL-001	6/27/12	1040	G	SO	3		2		X	X	X	X	X	X	X		

☐ E-mail to KLICKFIELD@SEVENSON.COM

EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Relinquished by:	Received by:	Date:	Time:
ERIC TSCHUDI	FEDEX	6/27/12	1700

FedEx InSight ®

Shipment Detail

Tracking Number
793729649447

Shipment Information

Status	On FedEx vehicle for delivery, WARWICK, RI
Ship (P/U) Date	06/27/2012
Est. Delivery Date	06/28/2012
Service Type	FedEx Priority Overnight
Number of Pieces	1
Weight	20 lb.

Shipper

Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd
South Plainfield, NJ 07080
US
9087695301

Shipment Reference

Reference Type	Description
Reference	Sevenson
Purchase Order Number	Cornell

Recipient

Sample Receiving
Mitkem Laboratories
175 METRO CENTER BLVD
WARWICK, RI 02886
US
4017323400

Associated Shipments | Shipment Description | Tracking Results

Associated Tracking Numbers

All Statuses

No Results Found

This is your default tab

Use of FedEx InSight is subject to the terms of the FedEx InSight Agreement. Included in that agreement are important disclaimers of warranties, limitations of liability, and provisions regarding indemnification, confidentiality, and permitted use of InSight. InSight does not amend, modify or alter the FedEx contract of carriage in any way, including declared value of limitations and Money-Back Guarantees. Please see the InSight Agreement for the terms and conditions applicable to InSight.

All weights are estimated. Shipments delayed because of Customs or other regulatory delays are not subject to refund or credit under the FedEx Money-Back Guarantee

+ Delivered on an IPD or IDF master air waybill means 'the shipment has been released for delivery'.

For more information, you may also contact your FedEx Representative or contact Customer Support

This site is protected by copyright and trademark laws under U.S. and International law. All rights reserved © 1995-2012 FedEx.

COMPACTION TEST REPORT

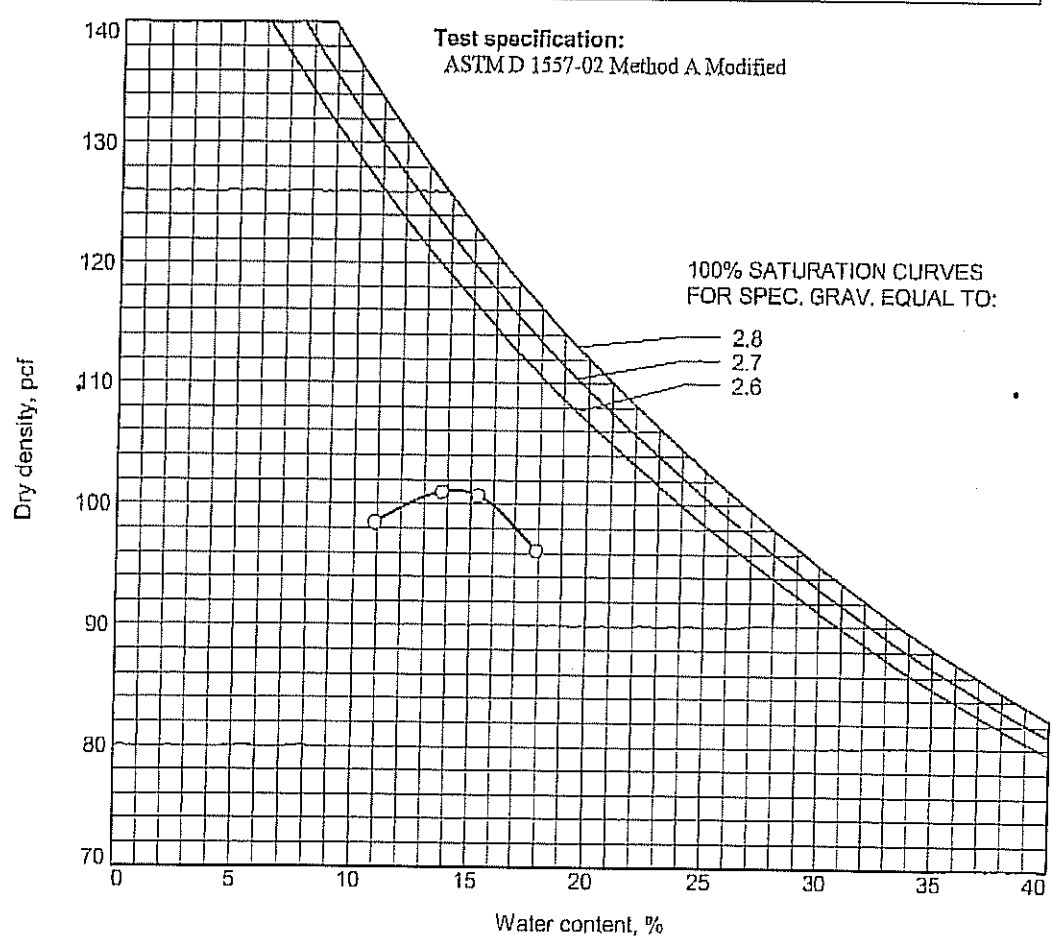
Project No.:
Date: 6/27/2012
Project: Cornell Dublier Superfund Site OU1
Client: Sevenson Environmental Services, INC
Location: EME
Sample Number: 535
Remarks:

MATERIAL DESCRIPTION

Description: Common Fill

Classifications - USCS: AASHTO:
Nat. Moist. = Sp.G. =
Liquid Limit = Plasticity Index =
% < No.200 = 10.7 %

TEST RESULTS
Maximum dry density = 101.1 pcf
Optimum moisture = 14.3 %

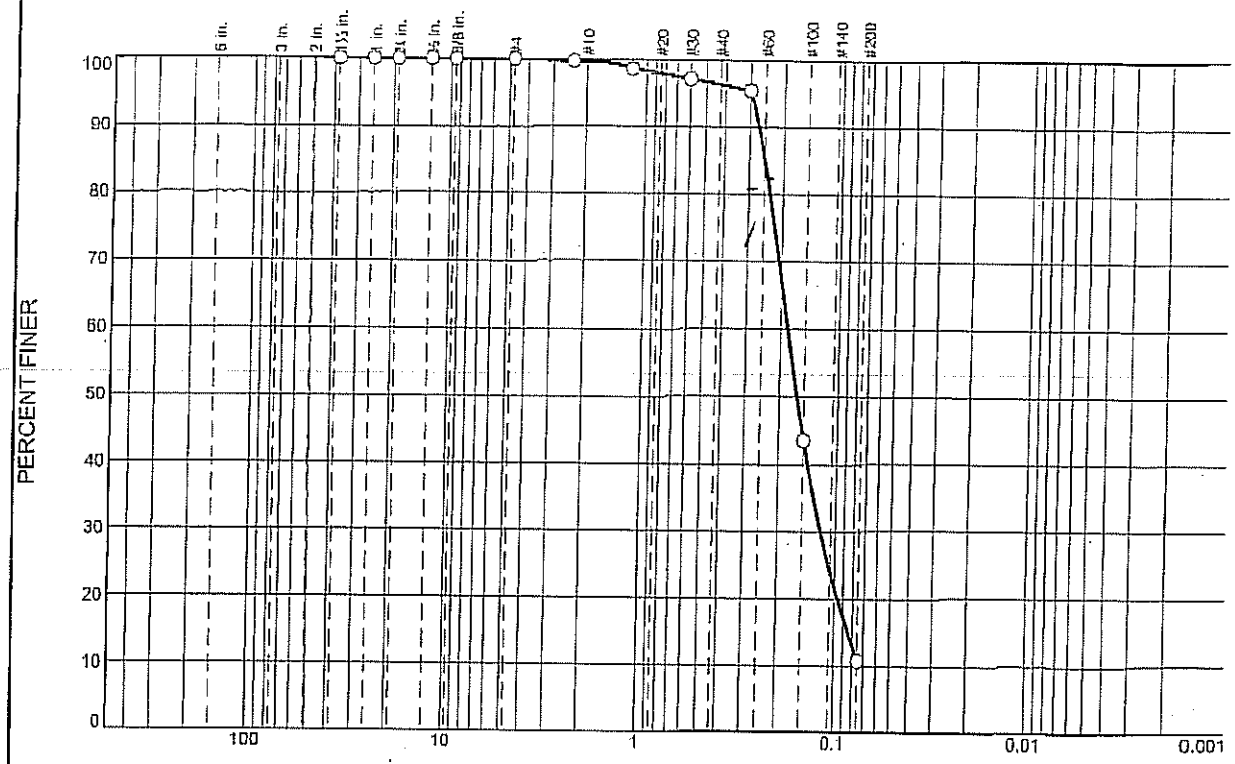


Figure

Nova Engineering & Environmental

Tested By: N Patel Checked By: C Patel

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	3.5	85.6	10.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	100.0		
.75	100.0		
.5	100.0		
.375	100.0		
#4	100.0		
#8	99.8		
#16	98.7		
#30	97.2		
#50	95.4		
#100	43.5		
#200	10.7		

* (no specification provided)

Material Description

Common Fill

Atterberg Limits

PL= NP LL= PI=

Coefficients

D_{90}= 0.2700 D_{85}= 0.2502 D_{60}= 0.1841
D_{50}= 0.1633 D_{30}= 0.1207 D_{15}= 0.0849
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Natural Moisture: 9.9 %
Plasticity Index: NP

Location: EME
Sample Number: 535

Date: 6/27/2012

Nova Engineering & Environmental Newark, NJ

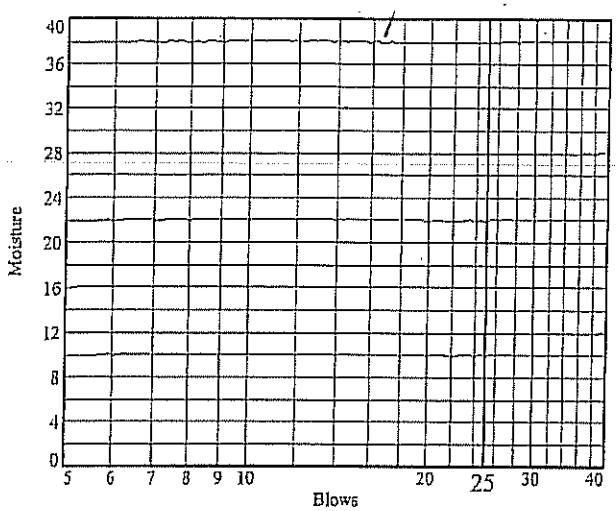
Client: Sevenson Environmental Services, INC
Project: Cornell Dublier Superfund Site OU1
Project No: Figure

Tested By: N Patel Checked By: C Patel

LIQUID AND PLASTIC LIMIT TEST DATA

7/25/2012

Client: Sevenson Environmental Services, INC
Project: Cornell Dublier Superfund Site OU1
Location: EME
Sample Number: 535
Material Description: Common Fill



Liquid Limit= _____
Plastic Limit= NP
Plasticity Index= _____

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare					
Dry+Tare					
Tare					
Moisture					

COMPACTION TEST REPORT

Project No.:
Project: Cornell Dublier Superfund Site OU1
Client: Sevenson Environmental Services, INC
Location: EME
Sample Number: 534
Remarks:

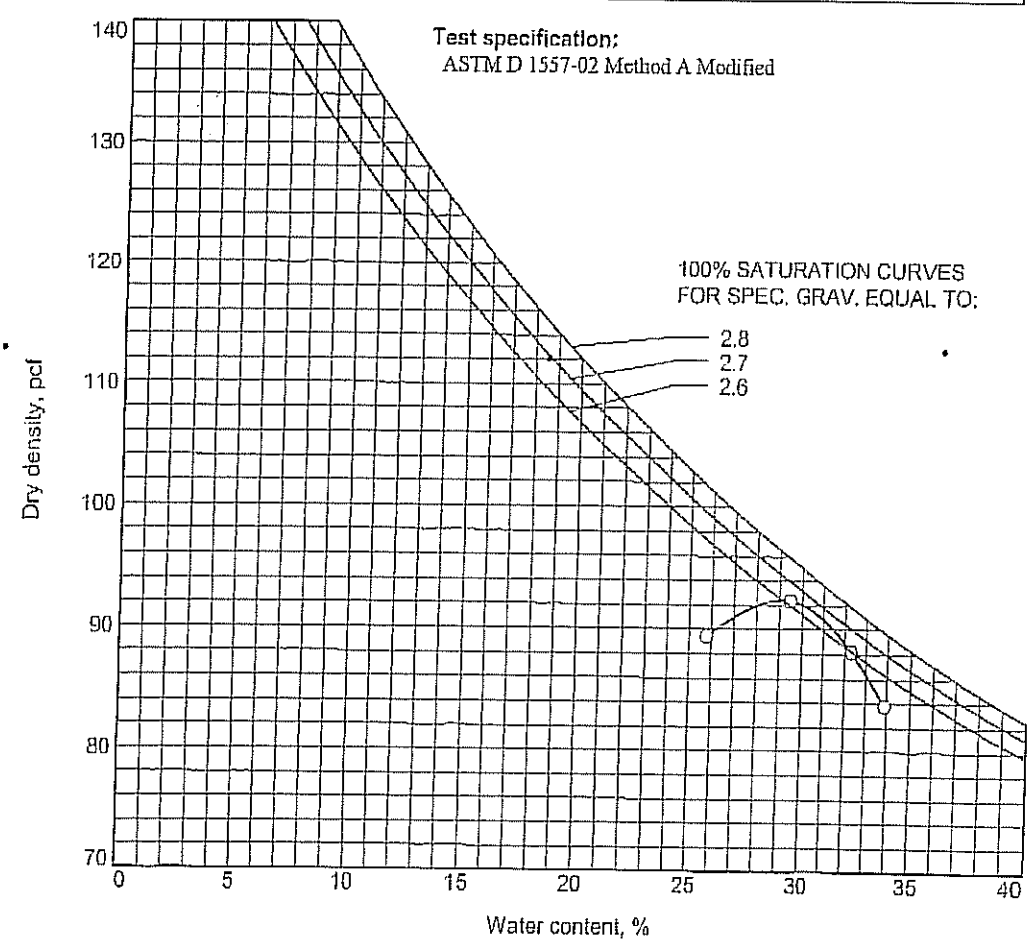
Date: 06/27/2012

MATERIAL DESCRIPTION

Description: Top Soil

Classifications - USCS: SC-SM AASHTO: A-2-4(0)
Nat. Moist. = Sp.G. =
Liquid Limit = 12 Plasticity Index = 4
% < No.200 = 29.8 %

TEST RESULTS
Maximum dry density = 92.4 pcf
Optimum moisture = 29.1 %

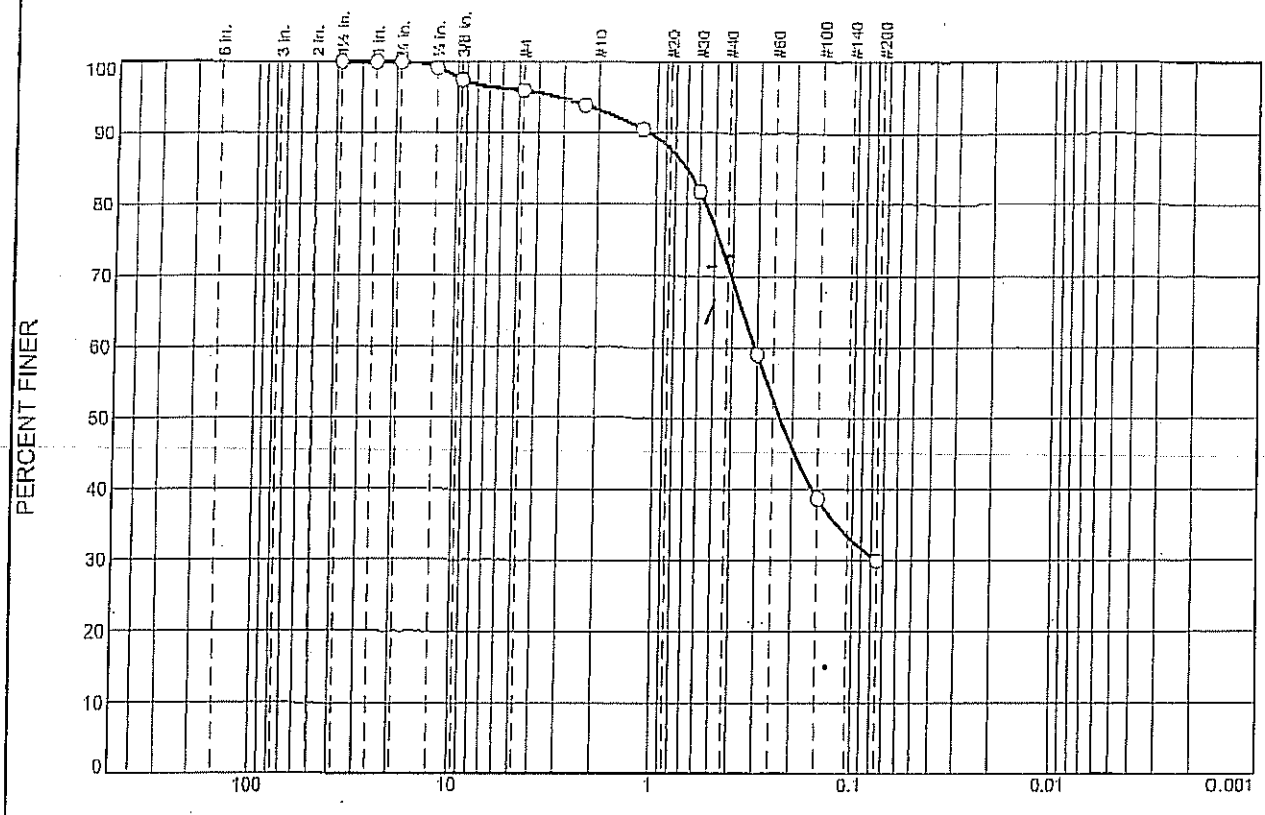


Figure

Nova Engineering & Environmental

Tested By: N Patel Checked By: C Patel

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.0	2.8	21.8	41.6	29.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	100.0		
.75	100.0		
.5	99.2		
.375	97.5		
#4	96.0		
#8	93.9		
#16	90.5		
#30	81.8		
#50	58.9		
#100	38.6		
#200	29.8		

* (no specification provided)

Material Description

Top Soil

Atterberg Limits

PL= 8 LL= 12 PI= 4

Coefficients

D_{90}= 1.0964 D_{85}= 0.7024 D_{60}= 0.3096
D_{50}= 0.2309 D_{30}= 0.0767 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Natural MOisutre: 28.5%
Organic Content: 9.8%
PH: 6.5

Location: EME
Sample Number: 534

Date: 06/27/2012

Nova Engineering & Environmental
Newark, NJ

Client: Sevenson Environmental Services, INC
Project: Cornell Dublier Superfund Site OU1

Project No: Figure

Tested By: N Patel Checked By: C Patel

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 09/10/2013

TRANSMITTAL NO.: 02320-368

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
7	Nova - Compaction Report #3	TEST REPORTS	2	1.6		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

NOVA

www.usanova.com

Testing & Inspection Report

Client: Seremson Environmental

Date: 05/31/13.

Project Name: CORNELL DUBILER

Architect:

Project Address: 211 New market Ave.

Construction Mgr:

Project Address: South Plainfield. NJ.

Engineer:

Contractor: Seremson.

Project #: 10218 10120 80

A NOVA representative was present at the above referenced site for the following activities:

CONCRETE INSPECTION

_____CY of _____psi concrete were placed at the following locations: _____ _____footings_____foundation walls_____slabs_____.

Results of required concrete tests are summarized on the attached report of concrete inspection.

SOIL COMPACTION INSPECTION

Structural Fill ____backfill ✓ other ( ) _____was tested for compaction using soil moisture-density gauge(#34410) sand cone _____or other (_____) at the following locations 211, New market ave property 223. (Attached drawing). Project specifications require 85 % of maximum dry density as determined in accordance with ASTM D1557 — ASTM D698 ___. Results are summarized on the attached report of soil compaction.

FOUNDATION EVALUATION

Shallow foundations were checked at subgrade elevations determined by the contractor. Using a geotechnical probe _____, dynamic cone penetrometer _____, or other method (_____). The following footings were or were not _____judged suitable for an allowable soil bearing pressure of _____as defined in the project specifications _____ _____.

ADDITIONAL INSPECTIONS

Masonry _____ Structural Steel _____ Asphalt _____ Fireproofing _____ Other (Specify)

Remarks: Soil Compaction test were performed at above location. Imported Soil Back fill in 1' feet Lift and compacted with Use of Small Smooth Drum Roller. See Attached Report for Results.

Time 8-11. AM

Inspector's Name: SKAM Inspector's Signature: [signature] Date: 05/31/13

NOTE: *This report covers the locations of the work inspected and tested following recognized standards and does not constitute engineering opinion or project control. NOVA is not responsible for jobsite safety or safety inspections beyond NOVA personnel.*

NOVA

www.usanova.com

FIELD DENSITY TEST WORKSHEET

Date: 05/31/13

Page 1 of 1

Project Name: CORNELL DUBILIR

Project No: 10218 10 13233

Project Location: South Plainfield,

Client: Severnson Env.

Contractor: Severnson Env

TEST INFORMATION			LABORATORY TEST				FIELD TEST					COMPACTION RESULTS		
Number	LOCATION (Specific Description)	Elevation	PROCTOR I.D.	SOIL DESCRIPTION	MAX DRY DENSITY (PCF)	% OPTIMUM MOISTURE	TEST DEPTH (INCHES)	DRY DENSITY (PCF)	% MOISTURE CONTENT	% COMPACTION	SPECIFIED % COMPACTION	PASS	FAIL	SPECIFIED % MOISTURE
1	Attached Drawing 211, NEW MARKET AVE.	Final		Imported Sandy	106.6	15.3	12"	105.6	12.1	99.1	85%	✓		34±
2	" "	"		" "	106.6	15.3	12"	104.4	13.0	98.0	85%	✓		34±
3	" "	12"		" "	106.6	15.3	12"	101.2	15.0	95.0	85%	✓		34±
4	" "	12"		" "	106.6	15.3	12"	101.8	14.1	95.5	85%	✓		34±
5	" "	Final		" "	106.6	15.3	12"	101.4	13.5	95.2	85%	✓		34±
6	" "	"			106.6	15.3	12"	102.1	13.8	95.8	85%	✓		34±

Type of Earth Moving Equip. & No. of Units: Dozer, Dump truck.

Type of Compaction Equip. & No. of Units: Small Smooth Drum Roller

Fill Lift Thickness (Typical): 12"

Method of Adding Moisture: N/A

Number of Passes by Compactor (Typical):

NOVA Observations ☐ Full-Time ☒ Part-Time

Proctor Type: ☐ Standard (ASTM D698-00a) ☒ Modified (ASTM D1557-00)

ASTM Test Method:
- ☐ Sand Cone (D1556-00)
- ☒ Nuclear Density/Moisture (D2922-96e1/D3017-96e1)
- ☐ Drive Ring (D2937-00)
- ☐ Moisture Content (D2216-98)

Nuclear Density Gauge Info:

Make TROXLER

Model 3430

Serial No. 34210

Daily Standard Count:

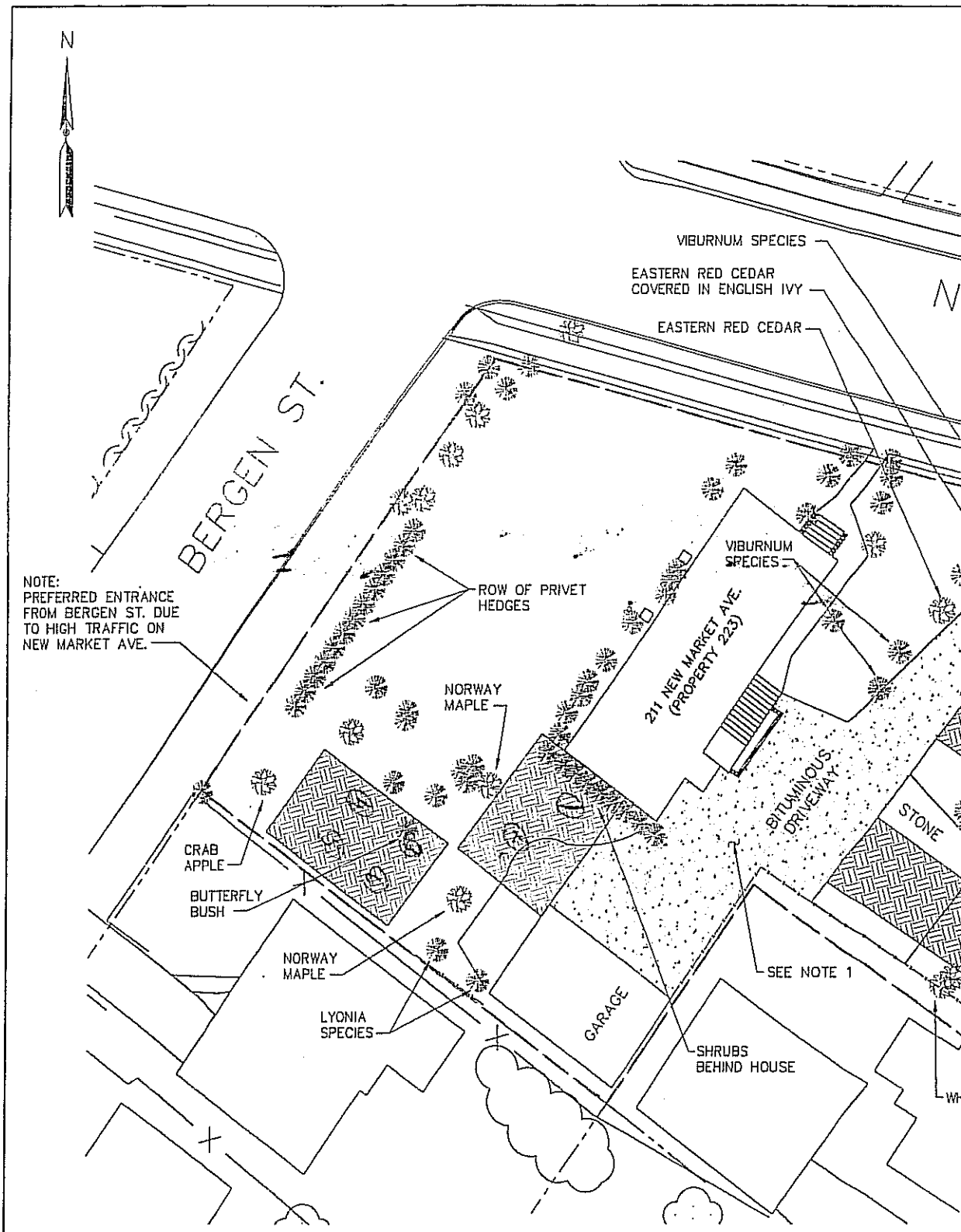
Density 106.6

Moisture 15.3

Comments:

MAX DRY Density Number provide from client.

NOVA Rep:


N
BERGEN ST.
NOTE:
PREFERRED ENTRANCE
FROM BERGEN ST. DUE
TO HIGH TRAFFIC ON
NEW MARKET AVE.
ROW OF PRIVET
HEDGES
VIBURNUM SPECIES
EASTERN RED CEDAR
COVERED IN ENGLISH IVY
EASTERN RED CEDAR
VIBURNUM
SPECIES
211 NEW MARKET AVE.
(PROPERTY 223)
NORWAY
MAPLE
BITUMINOUS
DRIVEWAY
STONE
CRAB
APPLE
BUTTERFLY
BUSH
NORWAY
MAPLE
LYONIA
SPECIES
GARAGE
SEE NOTE 1
SHRUBS
BEHIND HOUSE

Soil
05/31/13

NOVA

www.usanova.com

Testing & Inspection Report

Client: SEVENSON ENV. SERVICES

Date: 06. 05. 13.

Project Name: CORNELL DUBILIER SUPERFUND

Architect:

Project Address: 100 GARIBALDI AVE. SITE

Construction Mgr: SEVENSON E. SERVICES

Project Address: S. PLAINFIELD, NJ

Engineer: U.S. ARMY CORPS OF ENG.

Contractor: SEVENSON E. SERVICES

Project #: 10218 - 1012080

A NOVA representative was present at the above referenced site for the following activities:

CONCRETE INSPECTION

_____CY of _____psi concrete were placed at the following locations: _____ _____footings_____foundation walls_____slabs_____.

Results of required concrete tests are summarized on the attached report of concrete inspection.

SOIL COMPACTION INSPECTION ✓

Structural Fill ___backfill ✓ other ( ) _____was tested for compaction using soil moisture-density gauge (#B83) sand cone — or other (—) at the following locations FRONT LANDSCAPED AREA OF 100 GARIBALDI AVE. Project specifications require 85 % of maximum dry density as determined in accordance with ASTM D1557 _____ASTM D698 ✓. Results are summarized on the attached report of soil compaction.

FOUNDATION EVALUATION

Shallow foundations were checked at subgrade elevations determined by the contractor. Using a geotechnical probe _____, dynamic cone penetrometer _____, or other method (_____). The following footings were or were not _____judged suitable for an allowable soil bearing pressure of _____as defined in the project specifications _____.

ADDITIONAL INSPECTIONS

Masonry _____ Structural Steel _____ Asphalt _____ Fireproofing _____ Other (Specify)

Remarks: CONTRACTOR REMOVED HAZARDOUS MATERIAL FROM FRONT LANDSCAPED AREA OF PROPERTY ON 100 GARIBALDI AVE. UP TO SUBGRADE ELEVATION DETERMINED BY THE ENG. ON SITE. BACKFILLED AREA WITH COMMON FILL IN LIFTS, EACH LIFT WAS GRADED & COMPACTED WELL. COMPACTION WAS CHECKED WITH HDG. AT COUPLE OF SPOTS. SEE ATTACHED FIELD DENSITY TEST REPORT & DRCP. FOR LOCATIONS OF TEST PERFORMED.

Inspector's Name: N. PATEL Inspector's Signature: N. Patel Date: 06.05.13

NOTE: *This report covers the locations of the work inspected and tested following recognized standards and does not constitute engineering opinion or project control. NOVA is not responsible for jobsite safety or safety inspections beyond NOVA personnel.*

NOVA

www.usanova.com

FIELD DENSITY TEST WORKSHEET

Date: 06.05.13
Page 2 of 2

CORNELL DUBILIER
Project Name: SUPER FUND SITE.
Project No: 10218 - 1012080
Project Location: 100 GARIBALDI AVE.
Client: SEVENSON 3. PLAINFIELD
Contractor: SEVENSON

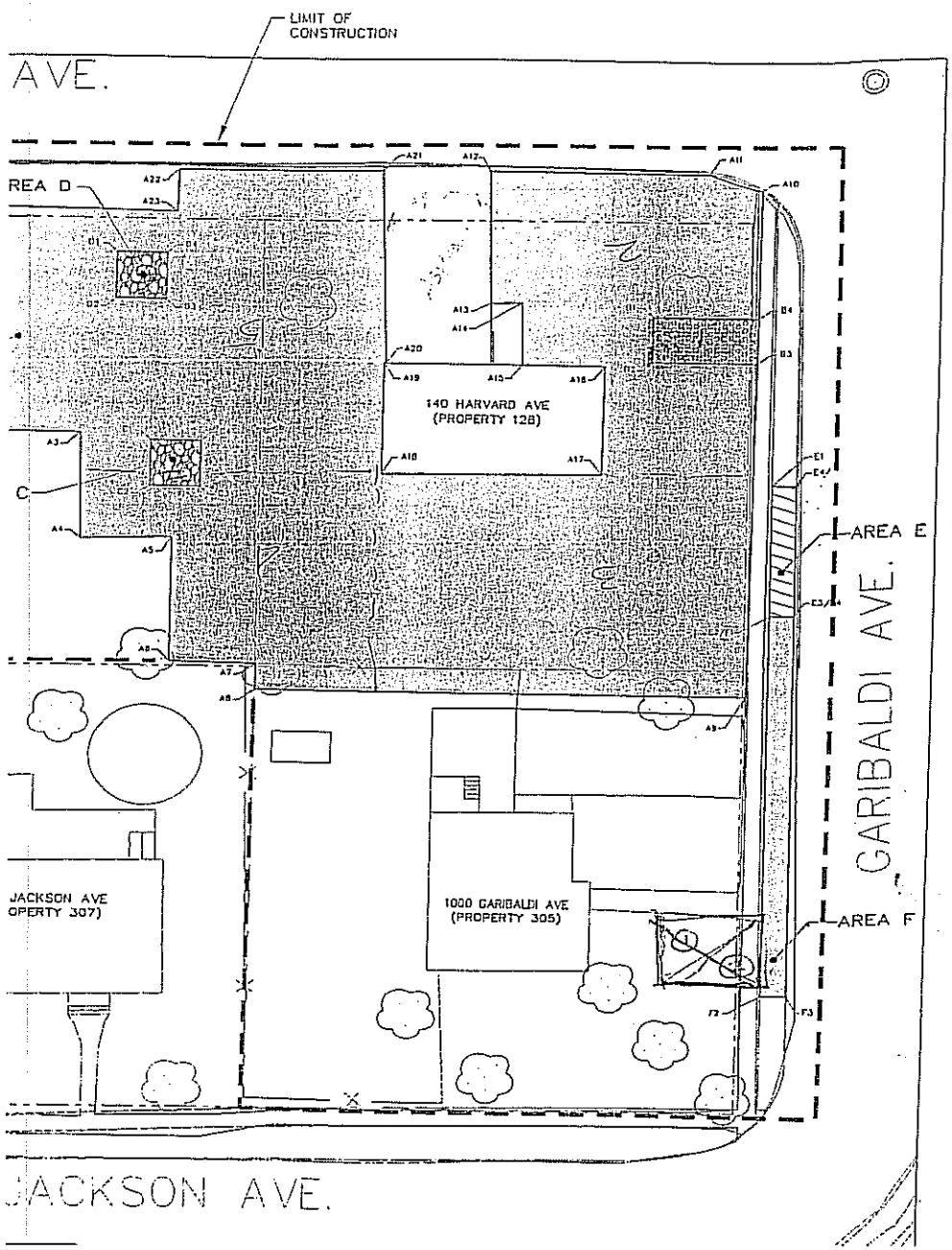
TEST INFORMATION			LABORATORY TEST				FIELD TEST					COMPACTION RESULTS		
Number	Location (Specific Description)	Elevation	Proctor I.D.	Soil Description	Max Dry Density (PCF)	% Optimum Moisture	Test Depth (Inches)	Dry Density (PCF)	% Moisture Content	% Compaction	Specified % Compaction	Pass	Fail	Specified % Moisture
1	TOWARS BLDG.	1-4" EG.		COMMON FILL	106.9	15.3	8"	91.8	16.6	86%	85%	✓		
2	TOWARS ROAD.	1-6" EG		COMMON FILL	106.9	15.3	8"	92.2	16.2	86.5%	85%	✓		

Type of Earth Moving Equip. & No. of Units: DOZER
Type of Compaction Equip. & No. of Units: COMPACTOR
Fill Lift Thickness (Typical): 10" LOOSE
Method of Adding Moisture: NATURAL
Number of Passes by Compactor (Typical): 4 TO 6
NOVA Observations ☐ Full-Time ☑ Part-Time
Proctor Type: ☑ Standard (ASTM D698-00a) ☐ Modified (ASTM D1557-00)
ASTM Test Method: ☐ Sand Cone (D1556-00)
☑ Nuclear Density/Moisture (D2922-96e1/D3017-96e1)
☐ Drive Ring (D2937-00)
☐ Moisture Content (D2216-98)

Nuclear Density Gauge Info: Make HUMBOLDT
Model 5001
Serial No. 2383
Daily Standard Count: Density
Moisture

Comments:

NOVA Rep: N. PATEL



LEGEND

- INDICATES EXCAVATION AREA FROM 0"–6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA FROM 0"–24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA FROM 0"–30" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION AREA FROM 0"–48" BELOW GROUND SURFACE (BGS)

NOTES:

1. COORDINATES FOR LAYOUT OF THE EXCAVATION AREAS ARE PROVIDED IN TABLE 3a
2. CONTRACTOR SHALL PROTECT ALL TREES. TREES SHALL ONLY BE REMOVED AT THE DIRECTION OF THE CONTRACTING OFFICER.
3. BEDROCK WAS ENCOUNTERED IN AREA B AT A DEPTH OF 48 INCHES BELOW GROUND SURFACE.
4. LOCATIONS SAMPLED IN 2011 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (I.E. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
5. CONTRACTOR SHALL NOTE THAT UTILITIES WERE FOUND AND MARKED IN APRIL 2012 DURING SITE INVESTIGATION ACTIVITIES WITHIN THE GARIBALDI AVE. AND HARVARD AVE RIGHT-OF-WAY. CONTRACTOR SHALL RE-LOCATE ALL UTILITIES PRIOR TO COMMENCING EXCAVATION, COORDINATE WITH APPLICABLE UTILITY COMPANIES AND IMPLEMENT PROTECTIVE MEASURES AS REQUIRED.

TABLE 3a EXCAVATION COORDINATE TABLE

EXCAVATION POINT	[illegible]	[illegible]
A1	[illegible]	[illegible]
A2	[illegible]	[illegible]
A3	[illegible]	[illegible]
A4	[illegible]	[illegible]
A5	[illegible]	[illegible]
A6	[illegible]	[illegible]
A7	[illegible]	[illegible]
A8	[illegible]	[illegible]
A9	[illegible]	[illegible]
A10	[illegible]	[illegible]
A11	[illegible]	[illegible]
A12	[illegible]	[illegible]
A13	[illegible]	[illegible]
A14	[illegible]	[illegible]
A15	[illegible]	[illegible]
A16	[illegible]	[illegible]
A17	[illegible]	[illegible]
A18	[illegible]	[illegible]
A19	[illegible]	[illegible]
A20	[illegible]	[illegible]
A21	[illegible]	[illegible]
A22	[illegible]	[illegible]
A23	[illegible]	[illegible]
B1	[illegible]	[illegible]
B2	[illegible]	[illegible]
B3	[illegible]	[illegible]
B4	[illegible]	[illegible]
C1	[illegible]	[illegible]
C2	[illegible]	[illegible]
C3	[illegible]	[illegible]
C4	[illegible]	[illegible]
D1	[illegible]	[illegible]
D2	[illegible]	[illegible]
D3	[illegible]	[illegible]
D4	[illegible]	[illegible]
E1	[illegible]	[illegible]
E2	[illegible]	[illegible]
E3	[illegible]	[illegible]
E4	[illegible]	[illegible]
F1	[illegible]	[illegible]
F2	[illegible]	[illegible]
F3	[illegible]	[illegible]
F4	[illegible]	[illegible]

TABLE 3b – VOLUME OF EXCAVATION

AREA	50 FT	VOLUME
A	13 [illegible]	[illegible] CY
B	[illegible]	[illegible] CY
C	[illegible]	[illegible] CY
D	[illegible]	[illegible] CY
E	[illegible]	[illegible] CY
F	[illegible]	[illegible] CY
TOTAL EXCAVATION VOLUME		1110 CY

GRAPHIC SCALE

10' 5 10 20' 30

ARCADIS

REVISIONS:

No.	Date	Remarks

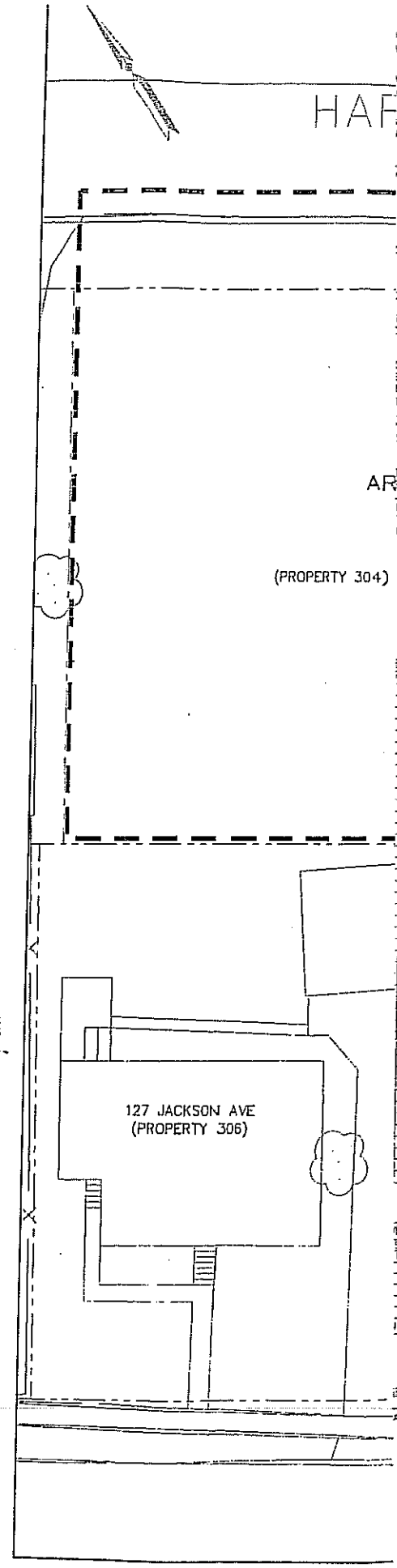
U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 128, 304 & 305
EXCAVATION PLAN

JOB NO.
CONTRACT NO.
SHEET NAME: FIGURE 3A
DRAWN BY: R. MANCELLI
DESIGNED BY: A. MASON
CHECKED BY: B. GRAND
SHEET 13 OF 15
FILE NAME:
DATE:

AREA OF TEST PERFORMED
06.05.13 (WEDNESDAY)



LEGEND

ATES EXCAVATION AREA FROM 0"–6"
V GROUND SURFACE (BGS)

ATES EXCAVATION AREA FROM 0"–24"
/ GROUND SURFACE (BGS)

ATES EXCAVATION AREA FROM 0"–30"
/ GROUND SURFACE (BGS)

ATES EXCAVATION AREA FROM 0"–48"
/ GROUND SURFACE (BGS)

OUT OF THE EXCAVATION AREAS ARE

OTECT ALL TREES. TREES SHALL ONLY BE
CTION OF THE CONTRACTING OFFICER.

TERED IN AREA B AT A DEPTH OF 48 INCHES
E

2011 WERE SURVEYED AND PLACED ON
. INCONSISTENCIES BETWEEN THE UPDATED
E PREVIOUS MAPPING PROVIDED BY OTHERS
HISTORICAL SAMPLING LOCATIONS TO APPEAR
TENT WITH PREVIOUS MAPPING (i.e. SOME
S APPEAR TO BE ON ROADWAYS, SIDEWALKS,
PLING LOCATIONS HAVE SINCE BEEN
SHOW THEM IN A MANNER CONSISTENT WITH

TE THAT UTILITIES WERE FOUND AND MARKED
SITE INVESTIGATION ACTIVITIES WITHIN THE
RVARD AVE RIGHT-OF-WAY. CONTRACTOR
UTILITIES PRIOR TO COMMENCING
E WITH APPLICABLE UTILITY COMPANIES AND
MEASURES AS REQUIRED.

EXCAVATION COORDINATE TABLE

Y=NORTHING	X=EASTING
633370.9715	515352.4339
633330.5101	515323.0369
633315.7362	515343.3714
633256.5400	515330.1000
633288.4800	515345.1100
633203.2055	515328.4225
633257.8232	515342.2716
633248.1220	515338.8560
633189.0229	515420.1990
633280.3050	515487.2504
633290.2611	515480.3843
633318.3941	515444.6152
633291.5100	515427.4800
633287.8660	515432.7719
633276.5995	515425.0675
633266.9622	515438.3356
633247.6415	515474.2431
633273.3868	515387.0850
633293.1524	515402.2786
633292.9485	515402.5594
633329.1900	515426.6800
633353.4858	515392.9268
633345.2200	515366.8100
633270.3723	515452.4759
633262.2822	515446.5981
633249.2519	515464.4403
633257.3112	515470.3602
633306.5666	515253.6795
633298.4764	515347.8018
633292.5985	515355.8018
633300.6887	515361.7697
633344.4302	515371.6013
633336.3480	515365.7234
633330.4701	515373.8138
633338.5603	515379.6915
633228.4628	515451.7457
633201.6701	515434.6913
633198.8172	515438.6719
633272.6292	515455.0289
633201.6701	515434.6913
633132.1178	515384.8388
633129.1167	515389.0365
633198.8172	515438.6719

VOLUME OF EXCAVATION

SQ. FT.	VOLUME
13,827	1024 CY
221	33 CY
100	9 CY
100	9 CY
143	3 CY
432	32 CY
VOLUME	1110 CY

GRAPHIC SCALE

10' 20' 30'

ARCADIS MALCOLM PIRNIE

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME

OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE

PROPERTY 128, 304 & 305
EXCAVATION PLAN

JOB NO:

CONTRACT NO:

SHEET NAME: FIGURE 3A

SHEET 13 OF 15

DRAWN BY: K. IAMICELI

DESIGNED BY: A. MASON

CHECKED BY: B. GIRARD

FILE NAME:

DATE:

PF

AREA OF TEST PERFORMED
06.05.13 (WEDNESDAY)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 02320-469

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
8	Topsoil Analytic Test-EME #3	TEST REPORTS	2	1.6		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **RS-BF-A85-100913; RS-BF-A86-100913**
Prepared By: **Ken Paisley**
CC: **Kim Lickfield**
Date: **11/20/13**

Waste Determination (if applicable): N/A (Site Backfill)

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to Site ROD criteria and the site-specific Sampling and Analysis Plan. The analyses performed are of acceptable data quality.

Analytical results from the sample event were compared against RDCSCC and Project Action Limit (IGWSCC NJAC 7:26 "Clean Soil Criteria") to identify exceedances. The sample did not exceed the Site criteria*.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that I have reviewed the data and find it to be as presented above.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

* The laboratory's Minimal Detection Concentration (MDC) for Ra-226 was above the Project Concentration Limit Goal of 1.0 pCi/g. Per the approved Site UFP-QAPP, the concentrations of Bi-214 and Pb-214 were used to quantitate the Ra-226 activity (see attached).

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 18, 2013

Ms. Agnes Huntley
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
646 Camp Avenue
North Kingstown, RI 02852

RE: Project: Roebling Steel - M1946
Pace Project No.: 30104966

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30104966001	RS-BF-A85-100913	Solid	10/09/13 11:00	10/11/13 10:00
30104966002	RS-BF-A86-100913	Solid	10/09/13 11:30	10/11/13 10:00

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30104966001	RS-BF-A85-100913	EPA 901.1m	RMK	11
30104966002	RS-BF-A86-100913	EPA 901.1m	RMK	11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: October 18, 2013

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

MXL

Sample Condition Upon Receipt

Pace Analytical

Client Name: SpecArum Project # 30104466

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7465845759 51

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other VEN 10-11-13

Thermometer Used 5 6 7 Type of Ice: ~~Wet~~ Blue ~~None~~ ☑ Samples on ice, cooling process has begun

Cooler Temperature NA Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: LEL 10-11-13

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed VEN / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] **Date:** 10/14/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALL-C003-6 SCURF front 2April2012.xls

Pace Analytical

Project Number: 30104966

Client Name: Spectrum

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other
001	82	12	LEW 10-1193																					
002	↓	↓																						

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
Dichlorodifluoromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Vinyl chloride	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromomethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Trichlorofluoromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1-Dichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Acetone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Iodomethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Carbon disulfide	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Methylene chloride	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
trans-1,2-Dichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Methyl tert-butyl ether	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1-Dichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Vinyl acetate	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2-Butanone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
cis-1,2-Dichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2,2-Dichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromochloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chloroform	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,1-Trichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1-Dichloropropene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Carbon tetrachloride	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Benzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Trichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Dibromomethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromodichloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
cis-1,3-Dichloropropene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
4-Methyl-2-pentanone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Toluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
trans-1,3-Dichloropropene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,2-Trichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,3-Dichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Tetrachloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2-Hexanone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Dibromochloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01
Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
1,2-Dibromoethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,1,2-Tetrachloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Ethylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
m,p-Xylene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
o-Xylene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Xylene (Total)	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Styrene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromoform	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Isopropylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,2,2-Tetrachloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,3-Trichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
n-Propylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2-Chlorotoluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,3,5-Trimethylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
4-Chlorotoluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
tert-Butylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,4-Trimethylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
sec-Butylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
4-Isopropyltoluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,3-Dichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,4-Dichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
n-Butylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dibromo-3-chloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,4-Trichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Hexachlorobutadiene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,3-Trichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Naphthalene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Acrolein	ND		23	ug/Kg	1	10/10/2013 13:38	74246
Acrylonitrile	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Methyl acetate	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
tert-Butyl Alcohol	ND		9.3	ug/Kg	1	10/10/2013 13:38	74246
Surrogate: Dibromofluoromethane	104		76-128	%REC	1	10/10/2013 13:38	74246
Surrogate: 1,2-Dichloroethane-d4	106		88-110	%REC	1	10/10/2013 13:38	74246
Surrogate: Toluene-d8	104		85-115	%REC	1	10/10/2013 13:38	74246
Surrogate: Bromofluorobenzene	90.1		85-120	%REC	1	10/10/2013 13:38	74246

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/18/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7471B -- Mercury by FIA							**SW7471**
Mercury	0.023	J	0.047	mg/Kg	1	10/17/2013 18:31	74313

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_S**
Aluminum	7300	B	8.4	mg/Kg	1	10/16/2013 11:01	74291
Antimony	0.62	J	0.84	mg/Kg	1	10/16/2013 11:01	74291
Arsenic	8.6		0.84	mg/Kg	1	10/16/2013 11:01	74291
Barium	29	B	8.4	mg/Kg	1	10/16/2013 11:01	74291
Beryllium	0.61	B	0.21	mg/Kg	1	10/16/2013 11:01	74291
Cadmium	ND		0.21	mg/Kg	1	10/16/2013 11:01	74291
Calcium	11000	B	34	mg/Kg	1	10/16/2013 11:01	74291
Chromium	41	B	0.84	mg/Kg	1	10/16/2013 11:01	74291
Cobalt	3.8		2.1	mg/Kg	1	10/16/2013 11:01	74291
Copper	6.8		1.3	mg/Kg	1	10/16/2013 11:01	74291
Iron	29000		170	mg/Kg	20	10/16/2013 11:16	74291
Lead	10	B	0.42	mg/Kg	1	10/16/2013 11:01	74291
Magnesium	2400	B	21	mg/Kg	1	10/16/2013 11:01	74291
Manganese	140		2.1	mg/Kg	1	10/16/2013 11:01	74291
Nickel	7.6		2.1	mg/Kg	1	10/16/2013 11:01	74291
Potassium	1900		42	mg/Kg	1	10/16/2013 11:01	74291
Selenium	ND		1.3	mg/Kg	1	10/16/2013 11:01	74291
Silver	ND		1.3	mg/Kg	1	10/16/2013 11:01	74291
Sodium	120		42	mg/Kg	1	10/16/2013 11:01	74291
Thallium	0.19	J	0.84	mg/Kg	1	10/16/2013 11:01	74291
Vanadium	39		2.1	mg/Kg	1	10/16/2013 11:01	74291
Zinc	48	B	2.1	mg/Kg	1	10/16/2013 11:01	74291

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
Phenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Bis(2-chloroethyl)ether	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Chlorophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,3-Dichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,4-Dichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,2-Dichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Methylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,2'-oxybis(1-Chloropropane)	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Methylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
N-Nitroso-di-n-propylamine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachloroethane	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Nitrobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Isophorone	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Nitrophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dimethylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dichlorophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,2,4-Trichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Naphthalene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Chloroaniline	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Bis(2-chloroethoxy)methane	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachlorobutadiene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Chloro-3-methylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Methylnaphthalene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachlorocyclopentadiene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4,6-Trichlorophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4,5-Trichlorophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
2-Chloronaphthalene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Nitroaniline	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Dimethylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Acenaphthylene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,6-Dinitrotoluene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
3-Nitroaniline	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Acenaphthene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dinitrophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
4-Nitrophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Dibenzofuran	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dinitrotoluene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Diethylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
4-Chlorophenyl-phenylether	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Fluorene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Nitroaniline	ND		440	ug/Kg	1	10/21/2013 21:41	74350
4,6-Dinitro-2-methylphenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
N-Nitrosodiphenylamine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Bromophenyl-phenylether	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Pentachlorophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Phenanthrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Anthracene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Carbazole	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Di-n-butylphthalate	110	J	220	ug/Kg	1	10/21/2013 21:41	74350
Fluoranthene	48	J	220	ug/Kg	1	10/21/2013 21:41	74350
Pyrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Butylbenzylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350
3,3'-Dichlorobenzidine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(a)anthracene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Chrysene	44	J	220	ug/Kg	1	10/21/2013 21:41	74350
Bis(2-ethylhexyl)phthalate	89	J	220	ug/Kg	1	10/21/2013 21:41	74350
Di-n-octylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(b)fluoranthene	59	J	220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(k)fluoranthene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(a)pyrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Indeno(1,2,3-cd)pyrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Dibenzo(a,h)anthracene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(g,h,i)perylene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,1'-Biphenyl	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,2,4,5-Tetrachlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Acetophenone	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Atrazine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Azobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzaldehyde	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzidine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Caprolactam	ND		220	ug/Kg	1	10/21/2013 21:41	74350
N-Nitrosodimethylamine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Surrogate: Nitrobenzene-d5	69.5		35-100	%REC	1	10/21/2013 21:41	74350
Surrogate: 2-Fluorobiphenyl	65.8		45-105	%REC	1	10/21/2013 21:41	74350
Surrogate: Terphenyl-d14	68.1		30-125	%REC	1	10/21/2013 21:41	74350

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913 **Project:** Roebling Steel
Lab ID: M1946-01 **Collection Date:** 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_S**
alpha-BHC	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
beta-BHC	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
delta-BHC	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
gamma-BHC (Lindane)	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Heptachlor	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Aldrin	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Heptachlor epoxide	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Endosulfan I	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Dieldrin	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
4,4'-DDE	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endrin	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endosulfan II	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
4,4'-DDD	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endosulfan sulfate	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
4,4'-DDT	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Methoxychlor	ND		23	ug/Kg	1	10/18/2013 23:02	74261
Endrin ketone	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endrin aldehyde	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
alpha-Chlordane	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
gamma-Chlordane	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Toxaphene	ND		230	ug/Kg	1	10/18/2013 23:02	74261
Surrogate: Tetrachloro-m-xylene	75.6		14-113	%REC	1	10/18/2013 23:02	74261
Surrogate: Decachlorobiphenyl	76.2		55-130	%REC	1	10/18/2013 23:02	74261

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/05/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913 **Project:** Roebling Steel
Lab ID: M1946-01 **Collection Date:** 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9012B -- Total Cyanide							**SW9012_S**
Cyanide	ND		1.1	mg/Kg	1	10/16/2013 10:20	74288

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1221	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1232	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1242	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1248	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1254	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1260	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Surrogate: Tetrachloro-m-xylene	57.3		34-147	%REC	1	10/16/2013 2:43	74262
Surrogate: Decachlorobiphenyl	53.4	S	60-125	%REC	1	10/16/2013 2:43	74262

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
Dichlorodifluoromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Vinyl chloride	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromomethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Trichlorofluoromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1-Dichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Acetone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Iodomethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Carbon disulfide	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Methylene chloride	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
trans-1,2-Dichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Methyl tert-butyl ether	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1-Dichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Vinyl acetate	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2-Butanone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
cis-1,2-Dichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2,2-Dichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromochloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chloroform	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,1-Trichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1-Dichloropropene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Carbon tetrachloride	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Benzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Trichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Dibromomethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromodichloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
cis-1,3-Dichloropropene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
4-Methyl-2-pentanone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Toluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
trans-1,3-Dichloropropene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,2-Trichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,3-Dichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Tetrachloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2-Hexanone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Dibromochloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02
Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
1,2-Dibromoethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,1,2-Tetrachloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Ethylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
m,p-Xylene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
o-Xylene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Xylene (Total)	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Styrene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromoform	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Isopropylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,2,2-Tetrachloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,3-Trichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
n-Propylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2-Chlorotoluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,3,5-Trimethylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
4-Chlorotoluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
tert-Butylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,4-Trimethylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
sec-Butylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
4-Isopropyltoluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,3-Dichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,4-Dichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
n-Butylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dibromo-3-chloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,4-Trichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Hexachlorobutadiene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,3-Trichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Naphthalene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Acrolein	ND		22	ug/Kg	1	10/10/2013 14:04	74246
Acrylonitrile	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Methyl acetate	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
tert-Butyl Alcohol	ND		8.9	ug/Kg	1	10/10/2013 14:04	74246
Surrogate: Dibromofluoromethane	105		76-128	%REC	1	10/10/2013 14:04	74246
Surrogate: 1,2-Dichloroethane-d4	117	S	88-110	%REC	1	10/10/2013 14:04	74246
Surrogate: Toluene-d8	101		85-115	%REC	1	10/10/2013 14:04	74246
Surrogate: Bromofluorobenzene	97.8		85-120	%REC	1	10/10/2013 14:04	74246

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/18/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7471B -- Mercury by FIA							**SW7471**
Mercury	0.022	J	0.050	mg/Kg	1	10/17/2013 18:33	74313

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_S**
Aluminum	6600	B	7.0	mg/Kg	1	10/16/2013 11:05	74291
Antimony	0.57	J	0.70	mg/Kg	1	10/16/2013 11:05	74291
Arsenic	6.0		0.70	mg/Kg	1	10/16/2013 11:05	74291
Barium	36	B	7.0	mg/Kg	1	10/16/2013 11:05	74291
Beryllium	0.48	B	0.18	mg/Kg	1	10/16/2013 11:05	74291
Cadmium	0.044	J	0.18	mg/Kg	1	10/16/2013 11:05	74291
Calcium	5200	B	28	mg/Kg	1	10/16/2013 11:05	74291
Chromium	25	B	0.70	mg/Kg	1	10/16/2013 11:05	74291
Cobalt	3.2		1.8	mg/Kg	1	10/16/2013 11:05	74291
Copper	9.8		1.1	mg/Kg	1	10/16/2013 11:05	74291
Iron	17000		7.0	mg/Kg	1	10/16/2013 11:05	74291
Lead	16	B	0.35	mg/Kg	1	10/16/2013 11:05	74291
Magnesium	2400	B	18	mg/Kg	1	10/16/2013 11:05	74291
Manganese	230		1.8	mg/Kg	1	10/16/2013 11:05	74291
Nickel	7.1		1.8	mg/Kg	1	10/16/2013 11:05	74291
Potassium	1500		35	mg/Kg	1	10/16/2013 11:05	74291
Selenium	ND		1.1	mg/Kg	1	10/16/2013 11:05	74291
Silver	ND		1.1	mg/Kg	1	10/16/2013 11:05	74291
Sodium	160		35	mg/Kg	1	10/16/2013 11:05	74291
Thallium	0.50	J	0.70	mg/Kg	1	10/16/2013 11:05	74291
Vanadium	29		1.8	mg/Kg	1	10/16/2013 11:05	74291
Zinc	51	B	1.8	mg/Kg	1	10/16/2013 11:05	74291

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
Phenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Bis(2-chloroethyl)ether	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Chlorophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,3-Dichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,4-Dichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,2-Dichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Methylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,2'-oxybis(1-Chloropropane)	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Methylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
N-Nitroso-di-n-propylamine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachloroethane	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Nitrobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Isophorone	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Nitrophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dimethylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dichlorophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,2,4-Trichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Naphthalene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Chloroaniline	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Bis(2-chloroethoxy)methane	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachlorobutadiene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Chloro-3-methylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Methylnaphthalene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachlorocyclopentadiene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4,6-Trichlorophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4,5-Trichlorophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
2-Chloronaphthalene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Nitroaniline	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Dimethylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Acenaphthylene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,6-Dinitrotoluene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
3-Nitroaniline	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Acenaphthene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dinitrophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
4-Nitrophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Dibenzofuran	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dinitrotoluene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Diethylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
4-Chlorophenyl-phenylether	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Fluorene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Nitroaniline	ND		410	ug/Kg	1	10/21/2013 22:05	74350
4,6-Dinitro-2-methylphenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
N-Nitrosodiphenylamine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Bromophenyl-phenylether	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Pentachlorophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Phenanthrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Anthracene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Carbazole	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Di-n-butylphthalate	110	J	210	ug/Kg	1	10/21/2013 22:05	74350
Fluoranthene	43	J	210	ug/Kg	1	10/21/2013 22:05	74350
Pyrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Butylbenzylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350
3,3'-Dichlorobenzidine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(a)anthracene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Chrysene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Bis(2-ethylhexyl)phthalate	140	J	210	ug/Kg	1	10/21/2013 22:05	74350
Di-n-octylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(b)fluoranthene	43	J	210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(k)fluoranthene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(a)pyrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Indeno(1,2,3-cd)pyrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Dibenzo(a,h)anthracene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(g,h,i)perylene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,1'-Biphenyl	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,2,4,5-Tetrachlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Acetophenone	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Atrazine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Azobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzaldehyde	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzidine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Caprolactam	ND		210	ug/Kg	1	10/21/2013 22:05	74350
N-Nitrosodimethylamine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Surrogate: Nitrobenzene-d5	71.1		35-100	%REC	1	10/21/2013 22:05	74350
Surrogate: 2-Fluorobiphenyl	69.8		45-105	%REC	1	10/21/2013 22:05	74350
Surrogate: Terphenyl-d14	68.8		30-125	%REC	1	10/21/2013 22:05	74350

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_S**
alpha-BHC	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
beta-BHC	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
delta-BHC	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
gamma-BHC (Lindane)	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Heptachlor	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Aldrin	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Heptachlor epoxide	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Endosulfan I	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Dieldrin	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
4,4'-DDE	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endrin	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endosulfan II	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
4,4'-DDD	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endosulfan sulfate	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
4,4'-DDT	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Methoxychlor	ND		21	ug/Kg	1	10/18/2013 23:16	74261
Endrin ketone	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endrin aldehyde	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
alpha-Chlordane	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
gamma-Chlordane	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Toxaphene	ND		210	ug/Kg	1	10/18/2013 23:16	74261
Surrogate: Tetrachloro-m-xylene	66.6		14-113	%REC	1	10/18/2013 23:16	74261
Surrogate: Decachlorobiphenyl	73.8		55-130	%REC	1	10/18/2013 23:16	74261

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/05/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9012B -- Total Cyanide							**SW9012_S**
Cyanide	ND		1.1	mg/Kg	1	10/16/2013 10:25	74288

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1221	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1232	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1242	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1248	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1254	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1260	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Surrogate: Tetrachloro-m-xylene	49.9		34-147	%REC	1	10/16/2013 3:01	74262
Surrogate: Decachlorobiphenyl	54.0	S	60-125	%REC	1	10/16/2013 3:01	74262

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 18, 2013

Ms. Agnes Huntley
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
646 Camp Avenue
North Kingstown, RI 02852

RE: Project: Roebling Steel - M1946
Pace Project No.: 30104966

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30104966001	RS-BF-A85-100913	Solid	10/09/13 11:00	10/11/13 10:00
30104966002	RS-BF-A86-100913	Solid	10/09/13 11:30	10/11/13 10:00

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30104966001	RS-BF-A85-100913	EPA 901.1m	RMK	11
30104966002	RS-BF-A86-100913	EPA 901.1m	RMK	11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: October 18, 2013

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Sample: RS-BF-A85-100913 **Lab ID: 30104966001** Collected: 10/09/13 11:00 Received: 10/11/13 10:00 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.357 ± 0.228 (0.416)**	pCi/g	10/18/13 13:24	14331-83-0	
Bismuth-212	EPA 901.1m	**0.272 ± 0.758 (1.351)**	pCi/g	10/18/13 13:24	14913-49-6	
Bismuth-214	EPA 901.1m	**0.558 ± 0.196 (0.170)**	pCi/g	10/18/13 13:24	14733-03-0	
Lead-212	EPA 901.1m	**0.431 ± 0.143 (0.129)**	pCi/g	10/18/13 13:24	15092-94-1	
Lead-214	EPA 901.1m	**0.303 ± 0.125 (0.164)**	pCi/g	10/18/13 13:24	15067-28-4	
Potassium-40	EPA 901.1m	**6.521 ± 1.578 (0.977)**	pCi/g	10/18/13 13:24	13966-00-2	
Radium-226	EPA 901.1m	**0.883 ± 1.012 (1.748)**	pCi/g	10/18/13 13:24	13982-63-3	
Radium-228	EPA 901.1m	**0.357 ± 0.228 (0.416)**	pCi/g	10/18/13 13:24	15262-20-1	
Thallium-208	EPA 901.1m	**0.107 ± 0.068 (0.102)**	pCi/g	10/18/13 13:24	14913-50-9	
Thorium-234	EPA 901.1m	**1.225 ± 0.999 (2.003)**	pCi/g	10/18/13 13:24	15065-10-8	
Uranium-235	EPA 901.1m	**-0.049 ± 1.739 (0.480)**	pCi/g	10/18/13 13:24	15117-96-1	

Sample: RS-BF-A86-100913 **Lab ID: 30104966002** Collected: 10/09/13 11:30 Received: 10/11/13 10:00 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.703 ± 0.233 (0.193)**	pCi/g	10/18/13 13:55	14331-83-0	
Bismuth-212	EPA 901.1m	**0.601 ± 0.884 (1.492)**	pCi/g	10/18/13 13:55	14913-49-6	
Bismuth-214	EPA 901.1m	**0.469 ± 0.193 (0.193)**	pCi/g	10/18/13 13:55	14733-03-0	
Lead-212	EPA 901.1m	**0.718 ± 0.185 (0.143)**	pCi/g	10/18/13 13:55	15092-94-1	
Lead-214	EPA 901.1m	**0.537 ± 0.197 (0.176)**	pCi/g	10/18/13 13:55	15067-28-4	
Potassium-40	EPA 901.1m	**5.937 ± 1.570 (1.464)**	pCi/g	10/18/13 13:55	13966-00-2	
Radium-226	EPA 901.1m	**1.348 ± 1.128 (1.871)**	pCi/g	10/18/13 13:55	13982-63-3	
Radium-228	EPA 901.1m	**0.703 ± 0.233 (0.193)**	pCi/g	10/18/13 13:55	15262-20-1	
Thallium-208	EPA 901.1m	**0.206 ± 0.076 (0.067)**	pCi/g	10/18/13 13:55	14913-50-9	
Thorium-234	EPA 901.1m	**1.602 ± 1.189 (2.134)**	pCi/g	10/18/13 13:55	15065-10-8	
Uranium-235	EPA 901.1m	**0.294 ± 0.309 (0.472)**	pCi/g	10/18/13 13:55	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Roebling Steel - M1946
Pace Project No.: 30104966

QC Batch: RADC/17432 | Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m | Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 30104966001, 30104966002

METHOD BLANK: 643918 | Matrix: Solid
Associated Lab Samples: 30104966001, 30104966002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Actinium-228	0.157 ± 0.299 (0.800)	pCi/g	10/15/13 13:26	
Bismuth-212	0.265 ± 1.386 (2.609)	pCi/g	10/15/13 13:26	
Bismuth-214	-0.101 ± 1.989 (0.520)	pCi/g	10/15/13 13:26	
Lead-212	-0.001 ± 0.144 (0.269)	pCi/g	10/15/13 13:26	
Lead-214	-0.090 ± 2.126 (0.394)	pCi/g	10/15/13 13:26	
Potassium-40	0.035 ± 1.267 (2.667)	pCi/g	10/15/13 13:26	
Radium-226	0.433 ± 1.786 (3.436)	pCi/g	10/15/13 13:26	
Thallium-208	0.026 ± 0.110 (0.205)	pCi/g	10/15/13 13:26	
Thorium-234	0.880 ± 1.109 (3.913)	pCi/g	10/15/13 13:26	
Uranium-235	0.037 ± 0.489 (0.906)	pCi/g	10/15/13 13:26	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN-OF-CUSTODY RECORD

WorkOrder : M1946
Project: Roebling Steel
Report Type : LEVEL 3
Due Date : 10/31/2013
FAX Due Date : 10/17/2013
Report To : Agnes R Huntley
Purchase Order : M1946
EDD Types : ADR
SEDD2A

Subcontractor:
Pace Analytical Services, Inc.
1638 Roseytown Road Suites 2, 3 & 4
Greensburg, PA 15601

Phone: (724) 850-5600

EQuISFacilityCode: N/A

= number of containers

Requested Test

Client Sample ID	Collection Date	#	Matrix	DUP/MS/MSD	Mitkem Sample ID	RADIUM_226228_S										
RS-BF-A85-100913	10/09/2013 11:00	1	Soil		M1946-01D	X										001
RS-BF-A86-100913	10/09/2013 11:30	1	Soil		M1946-02D	X										002

30124966

1) RADIUM_226228_S, RADIUM 226/228 (SOLID)

Use 'Client Sample IDs' when reporting data. If needed, truncate 'Client Sample IDs' to fit on reports. Use full 'Client Sample ID' when generating EDD.

Comments: Please analyze samples for "NORM" list, 5 days TAT

		Date/Time			Date/Time
Relinquished by:	Agnes R Huntley	10/10/13 14:24	Received by:		10-11-13 1000
Relinquished by:			Received by:		

10/10/2013
Page 1 of 1

646 Camp Ave * North Kingstown * RI * 02852 * 401-732-3400 * 401-732-3499
www.spectrum-analytical.com

Subcontract Purchase Order For Work Order M1946

PO Number: M1946

To: Pace Analytical Services, Inc.
1638 Roseytown Road Suites 2, 3 & 4
Greensburg, PA 15601
(724) 850-5600

Requested MS/D Billable?: Yes
Hard Copy Due Date: 10/31/2013
FAX Due Date: 10/17/2013
Hard Copy Format: LEVEL 3
EDD Format: ADR
SEDD2A

Comments:

Please analyze samples for "NORM" list, 5 days TAT

Test Code	Test No	# of Samples	Unit Cost	Total Cost
RADIUM_226228_S	RADIUM_226228_S	2	$160.00	$320.00

Send one copy of invoice to:

Spectrum Analytical, Inc
830 Silver St
Agawam, MA 01001
413-789-9018

Invoice must reference PO Number

10/10/2013 14:23

MXL

Sample Condition Upon Receipt

Pace Analytical

Client Name: SpecArum Project # 30104966

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7968845759 51

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other WN 10-11-13

Thermometer Used 5 6 7 Type of Ice: ~~Wet~~ Blue ~~None~~ ☑ Samples on ice, cooling process has begun

Cooler Temperature NA Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: LFA 10-11-13

Temp should be above freezing to 6°C

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☐Yes	☑No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☐No	☑N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☐Yes	☑No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL				
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed VFN / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 10/14/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALL-C003-6 SCURF front 2April2012.xls

Pace Analytical

Project Number: 30104966

Client Name: Spectrum

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other
001	SO	12																						
002	↓	↓																						

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 11/20/2013

TRANSMITTAL NO.: 02320-469

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
8	Topsoil Analytic Test-EME #3	TEST REPORTS	2	1.6		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: **RS-BF-A85-100913; RS-BF-A86-100913**
Prepared By: **Ken Paisley**
CC: **Kim Lickfield**
Date: **11/20/13**

Waste Determination (if applicable): N/A (Site Backfill)

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to Site ROD criteria and the site-specific Sampling and Analysis Plan. The analyses performed are of acceptable data quality.

Analytical results from the sample event were compared against RDCSCC and Project Action Limit (IGWSCC NJAC 7:26 "Clean Soil Criteria") to identify exceedances. The sample did not exceed the Site criteria*.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that I have reviewed the data and find it to be as presented above.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

* The laboratory's Minimal Detection Concentration (MDC) for Ra-226 was above the Project Concentration Limit Goal of 1.0 pCi/g. Per the approved Site UFP-QAPP, the concentrations of Bi-214 and Pb-214 were used to quantitate the Ra-226 activity (see attached).

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 18, 2013

Ms. Agnes Huntley
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
646 Camp Avenue
North Kingstown, RI 02852

RE: Project: Roebling Steel - M1946
Pace Project No.: 30104966

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30104966001	RS-BF-A85-100913	Solid	10/09/13 11:00	10/11/13 10:00
30104966002	RS-BF-A86-100913	Solid	10/09/13 11:30	10/11/13 10:00

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30104966001	RS-BF-A85-100913	EPA 901.1m	RMK	11
30104966002	RS-BF-A86-100913	EPA 901.1m	RMK	11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: October 18, 2013

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

MXL

Sample Condition Upon Receipt

Pace Analytical

Client Name: SpecArum Project # 30104466

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7465845759 51

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other VEN 10-11-13

Thermometer Used 5 6 7 Type of Ice: ~~Wet~~ Blue ~~None~~ ☑ Samples on ice, cooling process has begun

Cooler Temperature NA Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: LEL 10-11-13

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed VEN / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] **Date:** 10/14/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALL-C003-6 SCURF front 2April2012.xls

Pace Analytical

Project Number: 30104966

Client Name: Spectrum

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other
001	82	12	LEW 10-1193																					
002	↓	↓																						

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
Dichlorodifluoromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Vinyl chloride	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromomethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Trichlorofluoromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1-Dichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Acetone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Iodomethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Carbon disulfide	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Methylene chloride	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
trans-1,2-Dichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Methyl tert-butyl ether	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1-Dichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Vinyl acetate	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2-Butanone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
cis-1,2-Dichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2,2-Dichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromochloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chloroform	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,1-Trichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1-Dichloropropene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Carbon tetrachloride	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Benzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Trichloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Dibromomethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromodichloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
cis-1,3-Dichloropropene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
4-Methyl-2-pentanone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Toluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
trans-1,3-Dichloropropene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,2-Trichloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,3-Dichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Tetrachloroethene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2-Hexanone	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Dibromochloromethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01
Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
1,2-Dibromoethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Chlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,1,2-Tetrachloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Ethylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
m,p-Xylene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
o-Xylene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Xylene (Total)	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Styrene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromoform	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Isopropylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,1,2,2-Tetrachloroethane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Bromobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,3-Trichloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
n-Propylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
2-Chlorotoluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,3,5-Trimethylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
4-Chlorotoluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
tert-Butylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,4-Trimethylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
sec-Butylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
4-Isopropyltoluene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,3-Dichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,4-Dichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
n-Butylbenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2-Dibromo-3-chloropropane	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,4-Trichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Hexachlorobutadiene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
1,2,3-Trichlorobenzene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Naphthalene	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Acrolein	ND		23	ug/Kg	1	10/10/2013 13:38	74246
Acrylonitrile	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
Methyl acetate	ND		4.7	ug/Kg	1	10/10/2013 13:38	74246
tert-Butyl Alcohol	ND		9.3	ug/Kg	1	10/10/2013 13:38	74246
Surrogate: Dibromofluoromethane	104		76-128	%REC	1	10/10/2013 13:38	74246
Surrogate: 1,2-Dichloroethane-d4	106		88-110	%REC	1	10/10/2013 13:38	74246
Surrogate: Toluene-d8	104		85-115	%REC	1	10/10/2013 13:38	74246
Surrogate: Bromofluorobenzene	90.1		85-120	%REC	1	10/10/2013 13:38	74246

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/18/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7471B -- Mercury by FIA							**SW7471**
Mercury	0.023	J	0.047	mg/Kg	1	10/17/2013 18:31	74313

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_S**
Aluminum	7300	B	8.4	mg/Kg	1	10/16/2013 11:01	74291
Antimony	0.62	J	0.84	mg/Kg	1	10/16/2013 11:01	74291
Arsenic	8.6		0.84	mg/Kg	1	10/16/2013 11:01	74291
Barium	29	B	8.4	mg/Kg	1	10/16/2013 11:01	74291
Beryllium	0.61	B	0.21	mg/Kg	1	10/16/2013 11:01	74291
Cadmium	ND		0.21	mg/Kg	1	10/16/2013 11:01	74291
Calcium	11000	B	34	mg/Kg	1	10/16/2013 11:01	74291
Chromium	41	B	0.84	mg/Kg	1	10/16/2013 11:01	74291
Cobalt	3.8		2.1	mg/Kg	1	10/16/2013 11:01	74291
Copper	6.8		1.3	mg/Kg	1	10/16/2013 11:01	74291
Iron	29000		170	mg/Kg	20	10/16/2013 11:16	74291
Lead	10	B	0.42	mg/Kg	1	10/16/2013 11:01	74291
Magnesium	2400	B	21	mg/Kg	1	10/16/2013 11:01	74291
Manganese	140		2.1	mg/Kg	1	10/16/2013 11:01	74291
Nickel	7.6		2.1	mg/Kg	1	10/16/2013 11:01	74291
Potassium	1900		42	mg/Kg	1	10/16/2013 11:01	74291
Selenium	ND		1.3	mg/Kg	1	10/16/2013 11:01	74291
Silver	ND		1.3	mg/Kg	1	10/16/2013 11:01	74291
Sodium	120		42	mg/Kg	1	10/16/2013 11:01	74291
Thallium	0.19	J	0.84	mg/Kg	1	10/16/2013 11:01	74291
Vanadium	39		2.1	mg/Kg	1	10/16/2013 11:01	74291
Zinc	48	B	2.1	mg/Kg	1	10/16/2013 11:01	74291

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
Phenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Bis(2-chloroethyl)ether	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Chlorophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,3-Dichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,4-Dichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,2-Dichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Methylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,2'-oxybis(1-Chloropropane)	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Methylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
N-Nitroso-di-n-propylamine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachloroethane	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Nitrobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Isophorone	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Nitrophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dimethylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dichlorophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,2,4-Trichlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Naphthalene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Chloroaniline	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Bis(2-chloroethoxy)methane	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachlorobutadiene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Chloro-3-methylphenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Methylnaphthalene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachlorocyclopentadiene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4,6-Trichlorophenol	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4,5-Trichlorophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
2-Chloronaphthalene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2-Nitroaniline	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Dimethylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Acenaphthylene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,6-Dinitrotoluene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
3-Nitroaniline	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Acenaphthene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dinitrophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
4-Nitrophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Dibenzofuran	ND		220	ug/Kg	1	10/21/2013 21:41	74350
2,4-Dinitrotoluene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Diethylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
4-Chlorophenyl-phenylether	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Fluorene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Nitroaniline	ND		440	ug/Kg	1	10/21/2013 21:41	74350
4,6-Dinitro-2-methylphenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
N-Nitrosodiphenylamine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
4-Bromophenyl-phenylether	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Hexachlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Pentachlorophenol	ND		440	ug/Kg	1	10/21/2013 21:41	74350
Phenanthrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Anthracene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Carbazole	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Di-n-butylphthalate	110	J	220	ug/Kg	1	10/21/2013 21:41	74350
Fluoranthene	48	J	220	ug/Kg	1	10/21/2013 21:41	74350
Pyrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Butylbenzylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350
3,3'-Dichlorobenzidine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(a)anthracene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Chrysene	44	J	220	ug/Kg	1	10/21/2013 21:41	74350
Bis(2-ethylhexyl)phthalate	89	J	220	ug/Kg	1	10/21/2013 21:41	74350
Di-n-octylphthalate	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(b)fluoranthene	59	J	220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(k)fluoranthene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(a)pyrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Indeno(1,2,3-cd)pyrene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Dibenzo(a,h)anthracene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzo(g,h,i)perylene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,1'-Biphenyl	ND		220	ug/Kg	1	10/21/2013 21:41	74350
1,2,4,5-Tetrachlorobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Acetophenone	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Atrazine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Azobenzene	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzaldehyde	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Benzidine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Caprolactam	ND		220	ug/Kg	1	10/21/2013 21:41	74350
N-Nitrosodimethylamine	ND		220	ug/Kg	1	10/21/2013 21:41	74350
Surrogate: Nitrobenzene-d5	69.5		35-100	%REC	1	10/21/2013 21:41	74350
Surrogate: 2-Fluorobiphenyl	65.8		45-105	%REC	1	10/21/2013 21:41	74350
Surrogate: Terphenyl-d14	68.1		30-125	%REC	1	10/21/2013 21:41	74350

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913 **Project:** Roebling Steel
Lab ID: M1946-01 **Collection Date:** 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_S**
alpha-BHC	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
beta-BHC	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
delta-BHC	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
gamma-BHC (Lindane)	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Heptachlor	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Aldrin	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Heptachlor epoxide	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Endosulfan I	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Dieldrin	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
4,4'-DDE	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endrin	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endosulfan II	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
4,4'-DDD	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endosulfan sulfate	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
4,4'-DDT	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Methoxychlor	ND		23	ug/Kg	1	10/18/2013 23:02	74261
Endrin ketone	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
Endrin aldehyde	ND		4.4	ug/Kg	1	10/18/2013 23:02	74261
alpha-Chlordane	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
gamma-Chlordane	ND		2.3	ug/Kg	1	10/18/2013 23:02	74261
Toxaphene	ND		230	ug/Kg	1	10/18/2013 23:02	74261
Surrogate: Tetrachloro-m-xylene	75.6		14-113	%REC	1	10/18/2013 23:02	74261
Surrogate: Decachlorobiphenyl	76.2		55-130	%REC	1	10/18/2013 23:02	74261

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/05/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913 **Project:** Roebling Steel
Lab ID: M1946-01 **Collection Date:** 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9012B -- Total Cyanide							**SW9012_S**
Cyanide	ND		1.1	mg/Kg	1	10/16/2013 10:20	74288

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A85-100913
Lab ID: M1946-01

Project: Roebling Steel
Collection Date: 10/09/13 11:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1221	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1232	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1242	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1248	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1254	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Aroclor-1260	ND		44	ug/Kg	1	10/16/2013 2:43	74262
Surrogate: Tetrachloro-m-xylene	57.3		34-147	%REC	1	10/16/2013 2:43	74262
Surrogate: Decachlorobiphenyl	53.4	S	60-125	%REC	1	10/16/2013 2:43	74262

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
Dichlorodifluoromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Vinyl chloride	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromomethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Trichlorofluoromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1-Dichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Acetone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Iodomethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Carbon disulfide	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Methylene chloride	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
trans-1,2-Dichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Methyl tert-butyl ether	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1-Dichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Vinyl acetate	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2-Butanone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
cis-1,2-Dichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2,2-Dichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromochloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chloroform	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,1-Trichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1-Dichloropropene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Carbon tetrachloride	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Benzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Trichloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Dibromomethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromodichloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
cis-1,3-Dichloropropene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
4-Methyl-2-pentanone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Toluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
trans-1,3-Dichloropropene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,2-Trichloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,3-Dichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Tetrachloroethene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2-Hexanone	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Dibromochloromethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02
Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS							**SW8260_LOW_S**
1,2-Dibromoethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Chlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,1,2-Tetrachloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Ethylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
m,p-Xylene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
o-Xylene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Xylene (Total)	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Styrene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromoform	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Isopropylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,1,2,2-Tetrachloroethane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Bromobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,3-Trichloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
n-Propylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
2-Chlorotoluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,3,5-Trimethylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
4-Chlorotoluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
tert-Butylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,4-Trimethylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
sec-Butylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
4-Isopropyltoluene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,3-Dichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,4-Dichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
n-Butylbenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2-Dibromo-3-chloropropane	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,4-Trichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Hexachlorobutadiene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
1,2,3-Trichlorobenzene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Naphthalene	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Acrolein	ND		22	ug/Kg	1	10/10/2013 14:04	74246
Acrylonitrile	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
Methyl acetate	ND		4.5	ug/Kg	1	10/10/2013 14:04	74246
tert-Butyl Alcohol	ND		8.9	ug/Kg	1	10/10/2013 14:04	74246
Surrogate: Dibromofluoromethane	105		76-128	%REC	1	10/10/2013 14:04	74246
Surrogate: 1,2-Dichloroethane-d4	117	S	88-110	%REC	1	10/10/2013 14:04	74246
Surrogate: Toluene-d8	101		85-115	%REC	1	10/10/2013 14:04	74246
Surrogate: Bromofluorobenzene	97.8		85-120	%REC	1	10/10/2013 14:04	74246

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/18/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 7471B -- Mercury by FIA							**SW7471**
Mercury	0.022	J	0.050	mg/Kg	1	10/17/2013 18:33	74313

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_S**
Aluminum	6600	B	7.0	mg/Kg	1	10/16/2013 11:05	74291
Antimony	0.57	J	0.70	mg/Kg	1	10/16/2013 11:05	74291
Arsenic	6.0		0.70	mg/Kg	1	10/16/2013 11:05	74291
Barium	36	B	7.0	mg/Kg	1	10/16/2013 11:05	74291
Beryllium	0.48	B	0.18	mg/Kg	1	10/16/2013 11:05	74291
Cadmium	0.044	J	0.18	mg/Kg	1	10/16/2013 11:05	74291
Calcium	5200	B	28	mg/Kg	1	10/16/2013 11:05	74291
Chromium	25	B	0.70	mg/Kg	1	10/16/2013 11:05	74291
Cobalt	3.2		1.8	mg/Kg	1	10/16/2013 11:05	74291
Copper	9.8		1.1	mg/Kg	1	10/16/2013 11:05	74291
Iron	17000		7.0	mg/Kg	1	10/16/2013 11:05	74291
Lead	16	B	0.35	mg/Kg	1	10/16/2013 11:05	74291
Magnesium	2400	B	18	mg/Kg	1	10/16/2013 11:05	74291
Manganese	230		1.8	mg/Kg	1	10/16/2013 11:05	74291
Nickel	7.1		1.8	mg/Kg	1	10/16/2013 11:05	74291
Potassium	1500		35	mg/Kg	1	10/16/2013 11:05	74291
Selenium	ND		1.1	mg/Kg	1	10/16/2013 11:05	74291
Silver	ND		1.1	mg/Kg	1	10/16/2013 11:05	74291
Sodium	160		35	mg/Kg	1	10/16/2013 11:05	74291
Thallium	0.50	J	0.70	mg/Kg	1	10/16/2013 11:05	74291
Vanadium	29		1.8	mg/Kg	1	10/16/2013 11:05	74291
Zinc	51	B	1.8	mg/Kg	1	10/16/2013 11:05	74291

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
Phenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Bis(2-chloroethyl)ether	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Chlorophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,3-Dichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,4-Dichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,2-Dichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Methylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,2'-oxybis(1-Chloropropane)	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Methylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
N-Nitroso-di-n-propylamine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachloroethane	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Nitrobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Isophorone	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Nitrophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dimethylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dichlorophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,2,4-Trichlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Naphthalene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Chloroaniline	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Bis(2-chloroethoxy)methane	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachlorobutadiene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Chloro-3-methylphenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Methylnaphthalene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachlorocyclopentadiene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4,6-Trichlorophenol	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4,5-Trichlorophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
2-Chloronaphthalene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2-Nitroaniline	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Dimethylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Acenaphthylene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,6-Dinitrotoluene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
3-Nitroaniline	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Acenaphthene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dinitrophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
4-Nitrophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Dibenzofuran	ND		210	ug/Kg	1	10/21/2013 22:05	74350
2,4-Dinitrotoluene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Diethylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8270D -- SVOA by GC-MS							**SW8270_S**
4-Chlorophenyl-phenylether	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Fluorene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Nitroaniline	ND		410	ug/Kg	1	10/21/2013 22:05	74350
4,6-Dinitro-2-methylphenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
N-Nitrosodiphenylamine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
4-Bromophenyl-phenylether	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Hexachlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Pentachlorophenol	ND		410	ug/Kg	1	10/21/2013 22:05	74350
Phenanthrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Anthracene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Carbazole	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Di-n-butylphthalate	110	J	210	ug/Kg	1	10/21/2013 22:05	74350
Fluoranthene	43	J	210	ug/Kg	1	10/21/2013 22:05	74350
Pyrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Butylbenzylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350
3,3'-Dichlorobenzidine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(a)anthracene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Chrysene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Bis(2-ethylhexyl)phthalate	140	J	210	ug/Kg	1	10/21/2013 22:05	74350
Di-n-octylphthalate	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(b)fluoranthene	43	J	210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(k)fluoranthene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(a)pyrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Indeno(1,2,3-cd)pyrene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Dibenzo(a,h)anthracene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzo(g,h,i)perylene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,1'-Biphenyl	ND		210	ug/Kg	1	10/21/2013 22:05	74350
1,2,4,5-Tetrachlorobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Acetophenone	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Atrazine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Azobenzene	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzaldehyde	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Benzidine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Caprolactam	ND		210	ug/Kg	1	10/21/2013 22:05	74350
N-Nitrosodimethylamine	ND		210	ug/Kg	1	10/21/2013 22:05	74350
Surrogate: Nitrobenzene-d5	71.1		35-100	%REC	1	10/21/2013 22:05	74350
Surrogate: 2-Fluorobiphenyl	69.8		45-105	%REC	1	10/21/2013 22:05	74350
Surrogate: Terphenyl-d14	68.8		30-125	%REC	1	10/21/2013 22:05	74350

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/29/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8081B -- Organochlorine Pesticides by GC-ECD							**SW8081_S**
alpha-BHC	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
beta-BHC	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
delta-BHC	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
gamma-BHC (Lindane)	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Heptachlor	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Aldrin	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Heptachlor epoxide	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Endosulfan I	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Dieldrin	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
4,4'-DDE	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endrin	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endosulfan II	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
4,4'-DDD	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endosulfan sulfate	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
4,4'-DDT	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Methoxychlor	ND		21	ug/Kg	1	10/18/2013 23:16	74261
Endrin ketone	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
Endrin aldehyde	ND		4.2	ug/Kg	1	10/18/2013 23:16	74261
alpha-Chlordane	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
gamma-Chlordane	ND		2.1	ug/Kg	1	10/18/2013 23:16	74261
Toxaphene	ND		210	ug/Kg	1	10/18/2013 23:16	74261
Surrogate: Tetrachloro-m-xylene	66.6		14-113	%REC	1	10/18/2013 23:16	74261
Surrogate: Decachlorobiphenyl	73.8		55-130	%REC	1	10/18/2013 23:16	74261

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

11/05/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9012B -- Total Cyanide							**SW9012_S**
Cyanide	ND		1.1	mg/Kg	1	10/16/2013 10:25	74288

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

10/17/2013

Client: Sevenson Environmental Services Inc.
Client Sample ID: RS-BF-A86-100913
Lab ID: M1946-02

Project: Roebling Steel
Collection Date: 10/09/13 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8082A -- PCB by GC-ECD							**SW8082_S**
Aroclor-1016	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1221	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1232	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1242	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1248	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1254	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Aroclor-1260	ND		42	ug/Kg	1	10/16/2013 3:01	74262
Surrogate: Tetrachloro-m-xylene	49.9		34-147	%REC	1	10/16/2013 3:01	74262
Surrogate: Decachlorobiphenyl	54.0	S	60-125	%REC	1	10/16/2013 3:01	74262

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 18, 2013

Ms. Agnes Huntley
Spectrum Analytical, featuring Hanibal Technology
Rhode Island Division
646 Camp Avenue
North Kingstown, RI 02852

RE: Project: Roebling Steel - M1946
Pace Project No.: 30104966

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30104966001	RS-BF-A85-100913	Solid	10/09/13 11:00	10/11/13 10:00
30104966002	RS-BF-A86-100913	Solid	10/09/13 11:30	10/11/13 10:00

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30104966001	RS-BF-A85-100913	EPA 901.1m	RMK	11
30104966002	RS-BF-A86-100913	EPA 901.1m	RMK	11

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: October 18, 2013

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

Sample: RS-BF-A85-100913 **Lab ID: 30104966001** Collected: 10/09/13 11:00 Received: 10/11/13 10:00 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.357 ± 0.228 (0.416)**	pCi/g	10/18/13 13:24	14331-83-0	
Bismuth-212	EPA 901.1m	**0.272 ± 0.758 (1.351)**	pCi/g	10/18/13 13:24	14913-49-6	
Bismuth-214	EPA 901.1m	**0.558 ± 0.196 (0.170)**	pCi/g	10/18/13 13:24	14733-03-0	
Lead-212	EPA 901.1m	**0.431 ± 0.143 (0.129)**	pCi/g	10/18/13 13:24	15092-94-1	
Lead-214	EPA 901.1m	**0.303 ± 0.125 (0.164)**	pCi/g	10/18/13 13:24	15067-28-4	
Potassium-40	EPA 901.1m	**6.521 ± 1.578 (0.977)**	pCi/g	10/18/13 13:24	13966-00-2	
Radium-226	EPA 901.1m	**0.883 ± 1.012 (1.748)**	pCi/g	10/18/13 13:24	13982-63-3	
Radium-228	EPA 901.1m	**0.357 ± 0.228 (0.416)**	pCi/g	10/18/13 13:24	15262-20-1	
Thallium-208	EPA 901.1m	**0.107 ± 0.068 (0.102)**	pCi/g	10/18/13 13:24	14913-50-9	
Thorium-234	EPA 901.1m	**1.225 ± 0.999 (2.003)**	pCi/g	10/18/13 13:24	15065-10-8	
Uranium-235	EPA 901.1m	**-0.049 ± 1.739 (0.480)**	pCi/g	10/18/13 13:24	15117-96-1	

Sample: RS-BF-A86-100913 **Lab ID: 30104966002** Collected: 10/09/13 11:30 Received: 10/11/13 10:00 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1m	**0.703 ± 0.233 (0.193)**	pCi/g	10/18/13 13:55	14331-83-0	
Bismuth-212	EPA 901.1m	**0.601 ± 0.884 (1.492)**	pCi/g	10/18/13 13:55	14913-49-6	
Bismuth-214	EPA 901.1m	**0.469 ± 0.193 (0.193)**	pCi/g	10/18/13 13:55	14733-03-0	
Lead-212	EPA 901.1m	**0.718 ± 0.185 (0.143)**	pCi/g	10/18/13 13:55	15092-94-1	
Lead-214	EPA 901.1m	**0.537 ± 0.197 (0.176)**	pCi/g	10/18/13 13:55	15067-28-4	
Potassium-40	EPA 901.1m	**5.937 ± 1.570 (1.464)**	pCi/g	10/18/13 13:55	13966-00-2	
Radium-226	EPA 901.1m	**1.348 ± 1.128 (1.871)**	pCi/g	10/18/13 13:55	13982-63-3	
Radium-228	EPA 901.1m	**0.703 ± 0.233 (0.193)**	pCi/g	10/18/13 13:55	15262-20-1	
Thallium-208	EPA 901.1m	**0.206 ± 0.076 (0.067)**	pCi/g	10/18/13 13:55	14913-50-9	
Thorium-234	EPA 901.1m	**1.602 ± 1.189 (2.134)**	pCi/g	10/18/13 13:55	15065-10-8	
Uranium-235	EPA 901.1m	**0.294 ± 0.309 (0.472)**	pCi/g	10/18/13 13:55	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Roebling Steel - M1946
Pace Project No.: 30104966

QC Batch: RADC/17432 | Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m | Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 30104966001, 30104966002

METHOD BLANK: 643918 | Matrix: Solid
Associated Lab Samples: 30104966001, 30104966002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Actinium-228	0.157 ± 0.299 (0.800)	pCi/g	10/15/13 13:26	
Bismuth-212	0.265 ± 1.386 (2.609)	pCi/g	10/15/13 13:26	
Bismuth-214	-0.101 ± 1.989 (0.520)	pCi/g	10/15/13 13:26	
Lead-212	-0.001 ± 0.144 (0.269)	pCi/g	10/15/13 13:26	
Lead-214	-0.090 ± 2.126 (0.394)	pCi/g	10/15/13 13:26	
Potassium-40	0.035 ± 1.267 (2.667)	pCi/g	10/15/13 13:26	
Radium-226	0.433 ± 1.786 (3.436)	pCi/g	10/15/13 13:26	
Thallium-208	0.026 ± 0.110 (0.205)	pCi/g	10/15/13 13:26	
Thorium-234	0.880 ± 1.109 (3.913)	pCi/g	10/15/13 13:26	
Uranium-235	0.037 ± 0.489 (0.906)	pCi/g	10/15/13 13:26	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Roebling Steel - M1946
Pace Project No.: 30104966

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN-OF-CUSTODY RECORD

WorkOrder : M1946
Project: Roebling Steel
Report Type : LEVEL 3
Due Date : 10/31/2013
FAX Due Date : 10/17/2013
Report To : Agnes R Huntley
Purchase Order : M1946
EDD Types : ADR
SEDD2A

Subcontractor:
Pace Analytical Services, Inc.
1638 Roseytown Road Suites 2, 3 & 4
Greensburg, PA 15601

Phone: (724) 850-5600

EQuISFacilityCode: N/A

= number of containers

Requested Test

Client Sample ID	Collection Date	#	Matrix	DUP/MS/MSD	Mitkem Sample ID	RADIUM_226228_S										
RS-BF-A85-100913	10/09/2013 11:00	1	Soil		M1946-01D	X										001
RS-BF-A86-100913	10/09/2013 11:30	1	Soil		M1946-02D	X										002

30124966

1) RADIUM_226228_S, RADIUM 226/228 (SOLID)

Use 'Client Sample IDs' when reporting data. If needed, truncate 'Client Sample IDs' to fit on reports. Use full 'Client Sample ID' when generating EDD.

Comments: Please analyze samples for "NORM" list, 5 days TAT

		Date/Time			Date/Time
Relinquished by:	Agnes R Huntley	10/10/13 14:24	Received by:		10-11-13 1000
Relinquished by:			Received by:		

10/10/2013
Page 1 of 1

646 Camp Ave * North Kingstown * RI * 02852 * 401-732-3400 * 401-732-3499
www.spectrum-analytical.com

Subcontract Purchase Order For Work Order M1946

PO Number: M1946

To: Pace Analytical Services, Inc.
1638 Roseytown Road Suites 2, 3 & 4
Greensburg, PA 15601
(724) 850-5600

Requested MS/D Billable?: Yes
Hard Copy Due Date: 10/31/2013
FAX Due Date: 10/17/2013
Hard Copy Format: LEVEL 3
EDD Format: ADR
SEDD2A

Comments:

Please analyze samples for "NORM" list, 5 days TAT

Test Code	Test No	# of Samples	Unit Cost	Total Cost
RADIUM_226228_S	RADIUM_226228_S	2	$160.00	$320.00

Send one copy of invoice to:

Spectrum Analytical, Inc
830 Silver St
Agawam, MA 01001
413-789-9018

Invoice must reference PO Number

10/10/2013 14:23

MXL

Sample Condition Upon Receipt

Pace Analytical

Client Name: SpecArum Project # 30104966

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7968845759 51

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other WN 10-11-13

Thermometer Used 5 6 7 Type of Ice: ~~Wet~~ Blue ~~None~~ ☑ Samples on ice, cooling process has begun

Cooler Temperature NA Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: LFA 10-11-13

Temp should be above freezing to 6°C

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☐Yes	☑No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☐No	☑N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☐Yes	☑No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL				
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No		Initial when completed VFN / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 10/14/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALL-C003-6 SCURF front 2April2012.xls

Pace Analytical

Project Number: 30104966

Client Name: Spectrum

Item No.	Matrix Code	Glass Jar (120 / 250 / 500 / 1L)	Soil kit (2 SB, 1M, soil jar)	Chemistry (250 / 500 / 1L)	Organics (1L)	Nutrient (250 / 500)	Phenolics (250 ml)	TOC (40 ml / 250 ml)	TOX (250 ml)	Total Metals	Dissolved Metals preserved Y N	O & G (1L)	TPH (1L)	VOA (40 ml 30 ml)	Cyanide (250 ml)	Sulfide (500 ml)	Bacteria (120 ml)	Wipes / swipe/ smear/ filter	Radchem Nalgene (125 / 250 / 500 / 1L)	Radchem Nalgene (1/2 gal. / 1 gal.L)	Cubitainer (500 ml / 4L)	Ziploc	Other	Other
001	SO	12																						
002	↓	↓																						

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 04/11/2013

TRANSMITTAL NO.: 02320-243

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See Instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
5	Common Fill-Topsoil Analytic Test-EME #2	TEST REPORTS	2	1.6		A	N	F

REMARKS: * below UFP - QAPP criteria & soil cleanup criteria

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, A Corp

DATE: 11 APR 2013

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 04/11/2013

TRANSMITTAL NO.: 02320-243

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
5	Common Fill-Topsoil Analytic Test-EME #2	TEST REPORTS	2	1.6		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: CDE-OU1-Comfill-022813; CDE-OU1-Topsoil-022813
Prepared By: Ken Paisley
CC: Kim Lickfield
Date: 04/09/13

Waste Determination (if applicable): N/A (Site Backfill)

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to Site ROD criteria and the site-specific Sampling and Analysis Plan. The analyses performed are of acceptable data quality.

Analytical results from the sample event were compared against RDCSCC and Project Action Limit (IGWSCC NJAC 7:26 "Clean Soil Criteria") to identify exceedances. The sample did not exceed the Site criteria*.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that I have reviewed the data and find it to be as presented above.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

* The laboratory's Minimal Detection Concentration (MDC) for Ra-226 was above the Project Concentration Limit Goal of 1.0 pCi/g. Per the approved Site UFP-QAPP, the concentrations of Bi-214 and Pb-214 were used to quantitate the Ra-226 activity (see attached).

RADIOLOGICAL DATA

Sample ID	Nuclide Reported by Gamma Spec	Nuclide Of Interest (NJAC 7:28-12)	Result (pCi/g)	Project Action Limit (pCi/g)
CDE-OU1-COMFILL-022813	Actinium - 228	Th - 232	0.351	2
CDE-OU1-COMFILL-022813	Bismuth - 214	Ra - 226	0.548	2
CDE-OU1-COMFILL-022813	Lead - 214	Ra - 226	0.86	2
CDE-OU1-COMFILL-022813	Thorium - 234	U - 238	1.024	14
CDE-OU1-TOPSOIL-022813	Actinium - 228	Th - 232	0	2
CDE-OU1-TOPSOIL-022813	Bismuth - 214	Ra - 226	1.047	2
CDE-OU1-TOPSOIL-022813	Lead - 214	Ra - 226	1.086	2
CDE-OU1-TOPSOIL-022813	Thorium - 234	U - 238	0.918	14

NOVA
QUALITY ASSURANCE
CONSULTING SERVICES

4 Mark Road
Suite A
Kenilworth NJ.07033
Office: (908) 688-6682
Fax: (908) 688-6687

SEVENSON ENVIRONMENTAL
333 Hamilton Blvd
South Plainfield, NJ 07080

Subject: Top Soil Testing Results

Dear Sir:

A Sample of on-site soils were delivered to the NOVA laboratory labeled as EME – New Egypt Top Soil Gamma 6981 for pH testing and Organic Content. Organic Content test was performed in accordance with ASTM Standard D2974, and the pH test was performed in accordance with ASTM Standard D4972. It was determined that the supplied materials contained 1.9% organic materials. The pH for the soil was 6.0. The natural moisture content of the material at time of arrival was 12.1%.

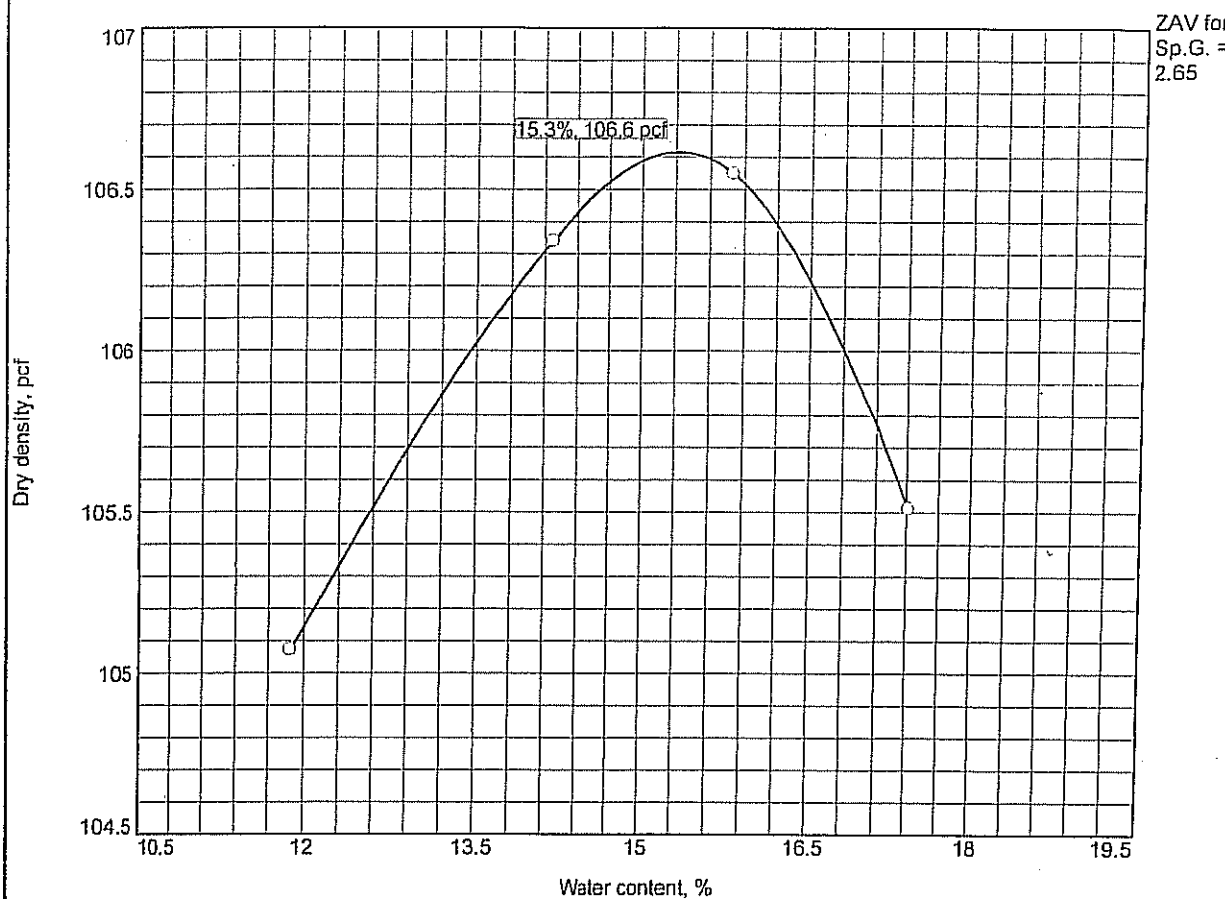
NOTE: This report does not reflect any environmental concerns with regards to usage of on-site materials.

We appreciate the opportunity to be of service to you on this project. Should you require any additional information please do not hesitate to contact our office.

Sincerely,
NOVA Quality Assurance Consulting Services, LLC

Dave Foster
Business Unit Manager

COMPACTION TEST REPORT



Test specification: ASTM D 1557-07 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
	SP-SM	A-3	12.1	2.65	NP	NP	0.9	5.5

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 106.6 pcf Optimum moisture = 15.3 %	Tan Brown Poorly Graded Sand with Silt

Project No. Client: Sevenson Environmental

Project: Sevenson Environmental

○Source of Sample: Common Fill Gamma -7531 Sample Number: Bulk - 1

Remarks:

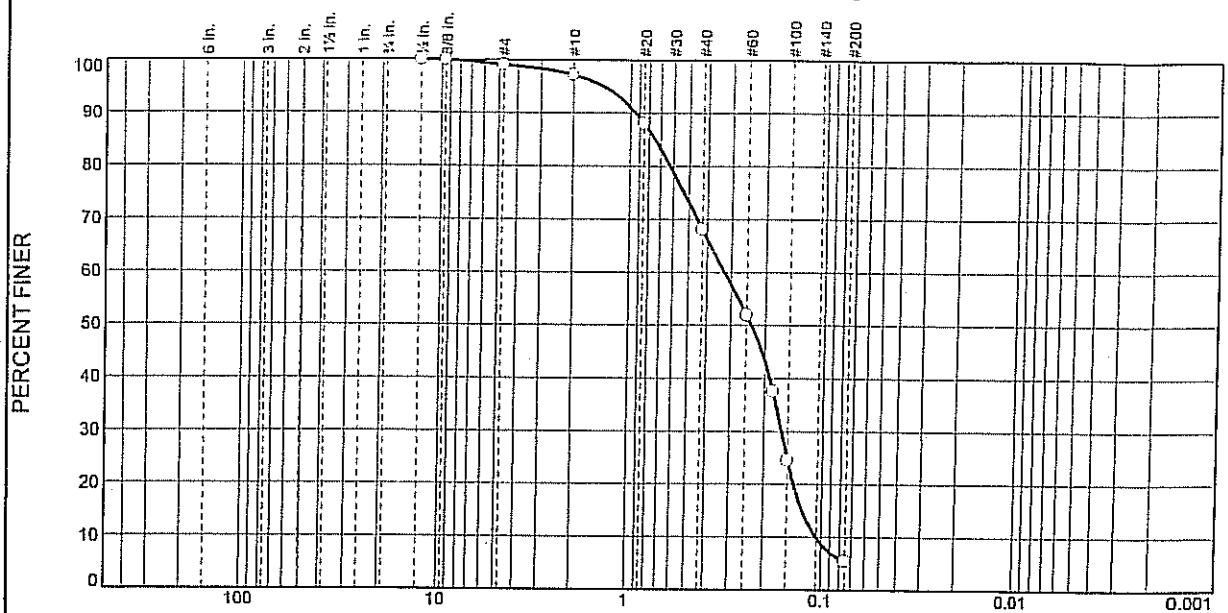
NOVA Quality Assurance Consulting Services, LLC

Kenilworth, New Jersey

Figure

Tested By: DF Checked By: DF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	1.9	29.1	62.6	5.5	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.5	100.0		
.375	100.0		
#4	99.1		
#10	97.2		
#20	88.0		
#40	68.1		
#60	51.9		
#80	37.5		
#100	24.4		
#200	5.5		

* (no specification provided)

Material Description

Tan Brown Poorly Graded Sand with Silt

Atterberg Limits (ASTM D 4318)

PL= NP LL= NP PI= NP

Classification

USCS (D 2487)= SP-SM AASHTO (M 145)= A-3

Coefficients

D_{90}= 0.9388 D_{85}= 0.7485 D_{60}= 0.3255
D_{50}= 0.2361 D_{30}= 0.1621 D_{15}= 0.1255
D_{10}= 0.1069 C_u= 3.04 C_c= 0.76

Remarks

Date Received: Date Tested: 3/4/13

Tested By: DF

Checked By: DF

Title: Laboratory Tech

Source of Sample: Common Fill Gamma -7531
Sample Number: Bulk - 1

Date Sampled:

NOVA Quality Assurance Consulting Services, LLC
Kenilworth, New Jersey

Client: Sevenson Environmental
Project: Sevenson Environmental

Project No: Figure

Report Date:
26-Mar-13 17:02

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M0273
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0273-01	CDE-OU1-COMFILL-022813	Soil	28-Feb-13 11:10	01-Mar-13 10:15
M0273-02	CDE-OU1-TOPSOIL-022813	Soil	28-Feb-13 11:40	01-Mar-13 10:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01B

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8B8548.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 13 Date Analyzed: 03/06/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	5.5	U
75-15-0	Carbon disulfide	5.5	U
75-09-2	Methylene chloride	2.3	J
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
78-93-3	2-Butanone	5.5	U
156-59-2	cis-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-43-2	Benzene	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
1330-20-7	Xylene (Total)	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01B

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8B8548.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 13 Date Analyzed: 03/06/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
107-02-8	Acrolein	28	U
107-13-1	Acrylonitrile	5.5	U
79-20-9	Methyl acetate	5.5	U
75-65-0	tert-Butyl Alcohol	11	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3857.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	190	U
111-44-4	Bis(2-chloroethyl)ether	190	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	190	U
106-44-5	4-Methylphenol	190	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
105-67-9	2,4-Dimethylphenol	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
87-68-3	Hexachlorobutadiene	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	190	U
88-06-2	2,4,6-Trichlorophenol	190	U
95-95-4	2,4,5-Trichlorophenol	380	U
88-74-4	2-Nitroaniline	380	U
208-96-8	Acenaphthylene	190	U
606-20-2	2,6-Dinitrotoluene	190	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	380	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	190	U
118-74-1	Hexachlorobenzene	190	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	190	U
120-12-7	Anthracene	190	U
86-74-8	Carbazole	190	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	190	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3857.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	190	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octylphthalate	190	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
92-52-4	1,1'-Biphenyl	190	U
98-86-2	Acetophenone	190	U
1912-24-9	Atrazine	190	U
103-33-3	Azobenzene	190	U
100-52-7	Benzaldehyde	190	U
92-87-5	Benzidine	190	U R
39638-32-9	Bis(2-chloroisopropyl)ether	190	U
105-60-2	Caprolactam	190	U
62-75-9	N-Nitrosodimethylamine	190	U

SVT 4.4.13

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H1766F.D/E4H1766R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	6.6	
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L8921F.D/E2L8921R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-01

Level (low/med): MED Date Received: 03/01/2013

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1370			P
7440-36-0	Antimony	0.35	U		P
7440-38-2	Arsenic	0.98			P
7440-39-3	Barium	5.0	B		P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.57			P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	0.64	B		P
7440-50-8	Copper	1.7			P
7439-92-1	Lead	2.4			P
7439-96-5	Manganese	8.5			P
7439-97-6	Mercury	0.025	B		CV
7440-02-0	Nickel	1.5	B		P
7782-49-2	Selenium	0.86	B		P
7440-22-4	Silver	0.23	B	U SU4-9	P
7440-28-0	Thallium	0.20	U		P
7440-62-2	Vanadium	6.7			P
7440-66-6	Zinc	3.8			P
57-12-5	Cyanide	0.42	U		CA

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-01

Level (low/med): MED Date Received: 03/01/2013

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1370			P
7440-36-0	Antimony	0.35	U		P
7440-38-2	Arsenic	0.98			P
7440-39-3	Barium	5.0	B		P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.57			P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	0.64	B		P
7440-50-8	Copper	1.7			P
7439-92-1	Lead	2.4			P
7439-96-5	Manganese	8.5			P
7439-97-6	Mercury	0.025	B		CV
7440-02-0	Nickel	1.5	B		P
7782-49-2	Selenium	0.86	B		P
7440-22-4	Silver	0.23	B	U SU 4-9-13	P
7440-28-0	Thallium	0.20	U		P
7440-62-2	Vanadium	6.7			P
7440-66-6	Zinc	3.8			P
57-12-5	Cyanide	0.42	U		CA

Comments:

ilm13.01.13.A

M0273

FORM I - IN

SW846

Page 92 of 111

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02B

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8B8497.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 18 Date Analyzed: 03/05/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5.8	U J
74-87-3	Chloromethane	5.8	U J
75-01-4	Vinyl chloride	5.8	U J
74-83-9	Bromomethane	5.8	U J
75-00-3	Chloroethane	5.8	U J
75-69-4	Trichlorofluoromethane	5.8	U J
75-35-4	1,1-Dichloroethene	5.8	U J
67-64-1	Acetone	210	J
75-15-0	Carbon disulfide	6.5	J
75-09-2	Methylene chloride	2.6	J
156-60-5	trans-1,2-Dichloroethene	5.8	U J
1634-04-4	Methyl tert-butyl ether	5.8	U J
75-34-3	1,1-Dichloroethane	5.8	U J
78-93-3	2-Butanone	31	J
156-59-2	cis-1,2-Dichloroethene	5.8	U J
67-66-3	Chloroform	5.8	U J
71-55-6	1,1,1-Trichloroethane	5.8	U J
56-23-5	Carbon tetrachloride	5.8	U J
107-06-2	1,2-Dichloroethane	4.5	J
71-43-2	Benzene	190	J
79-01-6	Trichloroethene	5.8	U J
78-87-5	1,2-Dichloropropane	5.8	U J
75-27-4	Bromodichloromethane	5.8	U J
10061-01-5	cis-1,3-Dichloropropene	5.8	U J
108-88-3	Toluene	190	J
10061-02-6	trans-1,3-Dichloropropene	5.8	U J
79-00-5	1,1,2-Trichloroethane	5.8	U J
127-18-4	Tetrachloroethene	5.8	U J
124-48-1	Dibromochloromethane	5.8	U J
106-93-4	1,2-Dibromoethane	5.8	U J
108-90-7	Chlorobenzene	5.8	U J
100-41-4	Ethylbenzene	15	J
1330-20-7	Xylene (Total)	250	J
100-42-5	Styrene	64	J
75-25-2	Bromoform	5.8	U J

SCS 4-9-13

sam13.03.14.A

SW846

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02B

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8B8497.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 18 Date Analyzed: 03/05/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U J
541-73-1	1,3-Dichlorobenzene	5.8	U J
106-46-7	1,4-Dichlorobenzene	5.8	U J
95-50-1	1,2-Dichlorobenzene	5.8	U J
96-12-8	1,2-Dibromo-3-chloropropane	5.8	U J
120-82-1	1,2,4-Trichlorobenzene	5.8	U J
107-02-8	Acrolein	29	U J
107-13-1	Acrylonitrile	5.8	U J
79-20-9	Methyl acetate	5.8	U J
75-65-0	tert-Butyl Alcohol	12	U J

SR 4-9-13

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3858.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	200	U
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
105-67-9	2,4-Dimethylphenol	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
87-68-3	Hexachlorobutadiene	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	410	U
88-74-4	2-Nitroaniline	410	U
208-96-8	Acenaphthylene	200	U
606-20-2	2,6-Dinitrotoluene	200	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	410	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine	200	U
118-74-1	Hexachlorobenzene	200	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U

SW846

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3858.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
92-52-4	1,1'-Biphenyl	200	U
98-86-2	Acetophenone	200	U
1912-24-9	Atrazine	200	U
103-33-3	Azobenzene	200	U
100-52-7	Benzaldehyde	200	U
92-87-5	Benzidine	200	U R SVE 4-09-13
39638-32-9	Bis(2-chloroisopropyl)ether	200	U
105-60-2	Caprolactam	200	U
62-75-9	N-Nitrosodimethylamine	200	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H1767F.D/E4H1767R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.3	P
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.2	
1024-57-3	Heptachlor epoxide	2.5	P
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	21	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2L8922F.D/E2L8922R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-02

Level (low/med): MED Date Received: 03/01/2013

% Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950			P
7440-36-0	Antimony	0.50	B	U	P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	21.3			P
7440-41-7	Beryllium	0.36			P
7440-43-9	Cadmium	0.42			P
7440-47-3	Chromium	12.7			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	9.6			P
7439-92-1	Lead	21.2			P
7439-96-5	Manganese	84.3			P
7439-97-6	Mercury	0.024	B		CV
7440-02-0	Nickel	4.8			P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.084	B	U	P
7440-28-0	Thallium	0.21	U		P
7440-62-2	Vanadium	21.7			P
7440-66-6	Zinc	26.9			P
57-12-5	Cyanide	0.49	U		CA

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-02

Level (low/med): MED Date Received: 03/01/2013

% Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950			P
7440-36-0	Antimony	0.50	B	U [illegible]	P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	21.3			P
7440-41-7	Beryllium	0.36			P
7440-43-9	Cadmium	0.42			P
7440-47-3	Chromium	12.7			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	9.6			P
7439-92-1	Lead	21.2			P
7439-96-5	Manganese	84.3			P
7439-97-6	Mercury	0.024	B		CV
7440-02-0	Nickel	4.8			P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.084	B	U [illegible]	P
7440-28-0	Thallium	0.21	U		P
7440-62-2	Vanadium	21.7			P
7440-66-6	Zinc	26.9			P
57-12-5	Cyanide	0.49	U		CA

Comments:

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813S

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cyanide	75-125	6.0		0.49	U	5.4	109		CA

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813D

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: 82.0 % Solids for Duplicate: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cyanide		0.4900	U	0.4900	U			CA

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 26, 2013

Ms. Agnes Huntley
Spectrum Analytical, Featuring Hanibal Technology
175 Metro Center Blvd
Warwick, RI 02886

RE: Project: M0273
Pace Project No.: 3088755

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report reissued 3/26/13 to reflect the inclusion of results for the NORM list as per COC.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: M0273
Pace Project No.: 3088755

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: M0273
Pace Project No.: 3088755

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3088755001	CDE-OU1-COMFILL-022813	Solid	02/28/13 11:10	03/05/13 09:50
3088755002	CDE-OU1-TOPSOIL-022813	Solid	02/28/13 11:40	03/05/13 09:50

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: M0273
Pace Project No.: 3088755

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3088755001	CDE-OU1-COMFILL-022813	EPA 901.1m	RMK	10
3088755002	CDE-OU1-TOPSOIL-022813	EPA 901.1m	RMK	10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: M0273
Pace Project No.: 3088755

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: March 26, 2013

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: M0273
Pace Project No.: 3088755

Sample: CDE-OU1-COMFILL-022813 Lab ID: 3088755001 Collected: 02/28/13 11:10 Received: 03/05/13 09:50 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Bismuth-212	EPA 901.1m	0.351 ± 0.901 (1.572)	pCi/g	03/22/13 13:25	14913-49-6	
Bismuth-214	EPA 901.1m	0.548 ± 0.175 (0.769)	pCi/g	03/22/13 13:25	14733-03-0	
Lead-212	EPA 901.1m	0.621 ± 0.188 (0.168)	pCi/g	03/22/13 13:25	15092-94-1	
Lead-214	EPA 901.1m	0.860 ± 0.210 (0.125)	pCi/g	03/22/13 13:25	15067-28-4	
Potassium-40	EPA 901.1m	6.952 ± 1.587 (0.592)	pCi/g	03/22/13 13:25	13966-00-2	
Radium-226	EPA 901.1m	2.890 ± 1.493 (1.767)	pCi/g	03/22/13 13:25	13982-63-3	
Radium-228	EPA 901.1m	0.971 ± 0.262 (0.159)	pCi/g	03/22/13 13:25	15262-20-1	
Thallium-208	EPA 901.1m	0.134 ± 0.076 (0.095)	pCi/g	03/22/13 13:25	14913-50-9	
Thorium-234	EPA 901.1m	1.024 ± 0.781 (3.839)	pCi/g	03/22/13 13:25	15065-10-8	
Uranium-235	EPA 901.1m	0.227 ± 0.332 (0.554)	pCi/g	03/22/13 13:25	15117-96-1	

Sample: CDE-OU1-TOPSOIL-022813 Lab ID: 3088755002 Collected: 02/28/13 11:40 Received: 03/05/13 09:50 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Bismuth-212	EPA 901.1m	0.000 ± 1.059 (1.921)	pCi/g	03/22/13 13:41	14913-49-6	
Bismuth-214	EPA 901.1m	1.047 ± 0.269 (0.741)	pCi/g	03/22/13 13:41	14733-03-0	
Lead-212	EPA 901.1m	0.446 ± 0.135 (0.143)	pCi/g	03/22/13 13:41	15092-94-1	
Lead-214	EPA 901.1m	1.086 ± 0.258 (0.193)	pCi/g	03/22/13 13:41	15067-28-4	
Potassium-40	EPA 901.1m	5.431 ± 1.514 (1.345)	pCi/g	03/22/13 13:41	13966-00-2	
Radium-226	EPA 901.1m	2.114 ± 1.794 (2.119)	pCi/g	03/22/13 13:41	13982-63-3	
Radium-228	EPA 901.1m	0.385 ± 0.216 (0.417)	pCi/g	03/22/13 13:41	15262-20-1	
Thallium-208	EPA 901.1m	0.136 ± 0.074 (0.089)	pCi/g	03/22/13 13:41	14913-50-9	
Thorium-234	EPA 901.1m	0.918 ± 0.756 (3.616)	pCi/g	03/22/13 13:41	15065-10-8	
Uranium-235	EPA 901.1m	0.276 ± 0.362 (0.621)	pCi/g	03/22/13 13:41	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: M0273
Pace Project No.: 3088755

QC Batch: RADC/15109 | Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m | Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3088755001, 3088755002

METHOD BLANK: 558056 | Matrix: Solid
Associated Lab Samples: 3088755001, 3088755002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Bismuth-212	-0.170 ± 0.593 (1.087)	pCi/g	03/22/13 13:57	
Bismuth-214	-0.011 ± 0.643 (0.472)	pCi/g	03/22/13 13:57	
Lead-212	-0.017 ± 0.693 (0.190)	pCi/g	03/22/13 13:57	
Lead-214	0.058 ± 0.077 (0.159)	pCi/g	03/22/13 13:57	
Potassium-40	-0.136 ± 5.433 (0.596)	pCi/g	03/22/13 13:57	
Radium-226	-0.073 ± 1.055 (1.616)	pCi/g	03/22/13 13:57	
Radium-228	-0.030 ± 1.206 (0.159)	pCi/g	03/22/13 13:57	
Thallium-208	-0.021 ± 2.244 (0.093)	pCi/g	03/22/13 13:57	
Thorium-234	-0.247 ± 5.673 (2.141)	pCi/g	03/22/13 13:57	
Uranium-235	0.024 ± 0.198 (0.373)	pCi/g	03/22/13 13:57	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: M0273
Pace Project No.: 3088755

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/28/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

2/28/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 2/28/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 43°F OVERCAST

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: BASIC PPE. LEVE D. WORK CLOTHES, HARD HAT, SAFETY GLASSES, BOOTS.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: DRIVE TO NEW EGYPT, NJ TO EME FACILITY TO COLLECT COMFILL/TOPSOIL SAMPLE.

Description of Chemical Data Acquisition Work Performed: VOC, SVOC, PESTICIDES, PCBs, METALS, CYANIDE, RADIOLOGICAL.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED VIA FEDEX TO MITKEM LABS. NO. LINGSTOWN, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 2/28/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/28/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSERVUDI

Date

2/28/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/28/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager ERIC TSCHUDI _____ 2/28/13

Name Signature Date

QC Reviewer _____ _____ 2/28/13

Name Signature Date

CQC Systems Manager _____ _____

Name Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 ~~LOCKPORT~~ HAMILTON BLVD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G2789024 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (CDE-001-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC	SVOC	PEST.	PCBs	METALS	CYANIDE	RADIOLOGICAL	TEMPONLY
	COMFILL-022813	2/28/13	1110	C	SO	1	2			X	X	X	X	X	X	X	
	TOPSOIL-022813	2/28/13	1140	C	SO	1	2			X	X	X	X	X	X	X	
	TEMP BLANK					1											X

☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	2/28/13	1700

(54) 2/28/13

COMMON FILL AND TOP SOIL SAMPLES

0900 45°F OVERCAST. ERIC TSCHUDI, (SES) WILLIAM RAMBRANA (SES) AND BRIAN PACKOWSKI (USACE) LEAVE CDESS TRAILER COMPOUND FOR EME FACILITY IN NEW EGYPT, NJ. TO COLLECT COMMON FILL AND TOP SOIL SAMPLES. - WILL STOP AT FREEHOLD SOIL CONSERVATION DISTRICT OFFICE TO DROP OF PLANS.

1000 ARRIVE AT FREEHOLD TO DROP OFF PLANS.

1040 LEAVE FREEHOLD TO CONTINUE TO NEW EGYPT.

1100 ARRIVE TO EME FACILITY IN NEW EGYPT MEET WITH KIETH PRINCE OF EME. TEL.# 609 758 3400. K.P. DIRECTS US TO THE COMMON FILL PILL TO BE SAMPLED. CHECK PILE WITH GAMMA METER - LUDLUM 2221 WITH 44-10 PROBE. GENERAL AREA 6-8K CPM. 1 MIN COUNT: 6981 CPM.

1110 COLLECT 4 OZ VOA JAR DIRECTLY FROM PILE. SAMPLE CODE: CDE-001-COMFIL-022813, USING CLEAN STAINLESS STEEL SPOON AND FOIL PAN → FOR REMAINING ALIQUOTS. MIX ADDITIONAL SOIL MATERIAL IN PAN FILL 2-8 OZ SOIL JARS TO COMPLETE COMMON FILL SAMPLE. W.Z. FILLS 2-5 GAL BUCKETS FOR SOIL TESTING.

2/28/13

COMMON FILL AND TOP SOIL SAMPLES

2/28/13 (55)

MOVE TO ANOTHER AREA OF EME FACILITY TO SET UP TO SAMPLE THE TOP SOIL PILE. K.P. DIRECTS US TO A CERTAIN PILE. TAKE GAMMA READINGS. GEN. AREA = 6-8K CPM. 1-MIN. COUNT = 7531 CPM.

1140 COLLECT CDE-001-TOPSOIL-022813. FILL 4-OZ SOIL VOA DIRECTLY FROM PILE. USE FOIL PAN TO COLLECT SOIL MATERIAL FOR HOMOGENIZATION. MIX THOROUGHLY. FILL 2-8 OZ SOIL JARS. SAMPLES ARE PUT IN COOLER FOR TRIP BACK TO SES SITE. SAMPLES TO BE SHIPPED VIA FED EX OVERNIGHT TO MITKEM LABS: 646 CAMP AVE, NORTH KINGSTOWN, RHODE ISLAND, 02852. ED LAWLER CONTACT: 401 732 3400.

1210 RETURN TO SOUTH PLAINFIELD.

1300-1315 ARRIVE AT JOB SITE. BEGIN PAPERWORK TO PACK AND SHIP SAMPLES TO LAB. SAMPLES, BOTH COM FILL AND TOP SOIL WILL BE ANALYSED FOR THE FOLLOWING: VOC, SVOC, PEST., PCB, METALS, CYANIDE + RADIOLOGICAL.

2/28/13

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1310121219032 6

Ship Date: 28FEB13
ActWgt: 25.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 01 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 7948 6108 3882
0201

ZA NCOA

02852
RI-US
PVD

51BG2/DCF8/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794861083882
Ship date: 02/28/2013
Estimated shipping charges: 38.63

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

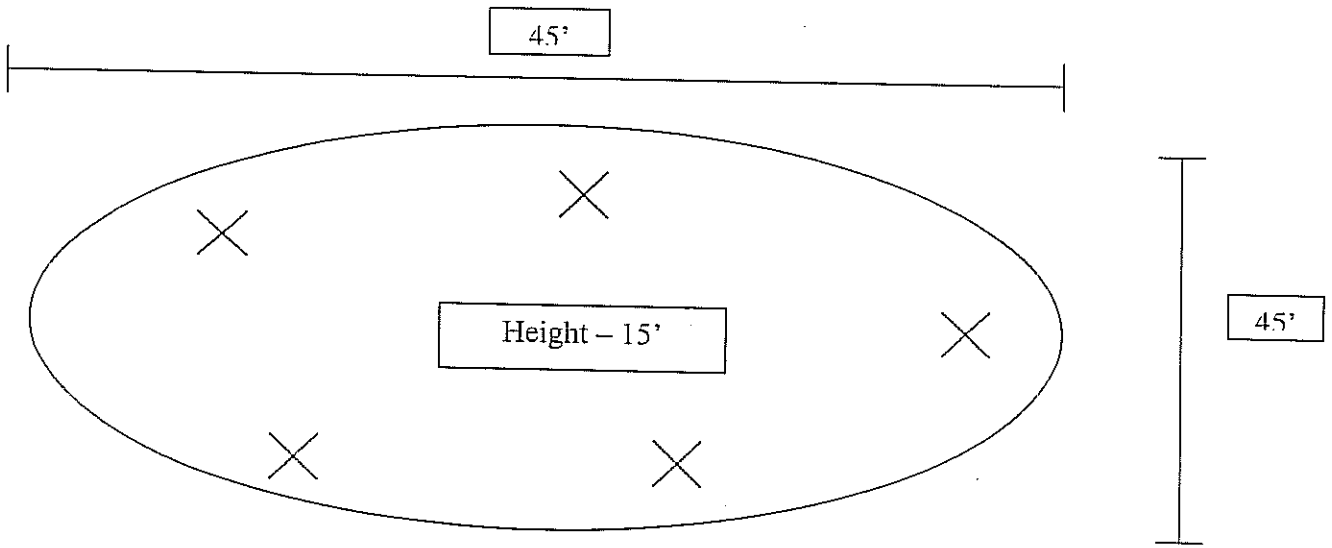
Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedExService Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

EME Common Fill Soil Pile

Sampled: 2/28/2013



Ludlum 2221 Gamma Meter with 4410 probe used to measure radiological activity of stockpile. Radiological count background was measured at ~ 6.5 μR/hr, stockpile radiological count ranged from 6-8 μR/hr, and one minute radiological count was 7.5 μR/hr (obtained from location with the highest instantaneous Radiological count).

× → 5 discreet sample locations were composited and homogenized to represent the composition of the stockpile

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 04/11/2013

TRANSMITTAL NO.: 02320-243

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See Instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
5	Common Fill-Topsoil Analytic Test-EME #2	TEST REPORTS	2	1.6		A	N	F

REMARKS: * below UFP - QAPP criteria & soil cleanup criteria

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Patrick Nejand, A Corp

DATE: 11 APR 2013

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 04/11/2013

TRANSMITTAL NO.: 02320-243

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS

(This section will be initiated by the contractor)

TO: Environmental Residency
US Army Corps of Engineers
214 State Highway 18
East Brunswick, NJ 08816

FROM: Sevenson Environmental Services
2749 Lockport Road
Niagara Falls, NY 14305

CONTRACT NO.: W912DQ-10-D-3006 0002

CHECK ONE:
[X] THIS IS A NEW TRANSMITTAL
[ ] THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02320

PROJECT TITLE AND LOCATION: 01-Main Register
Cornell Dubilier OU1 Soils Remediation 333 Hamilton Boulevard, South Plainfield, NJ 07080

CHECK ONE: THIS TRANSMITTAL IS FOR [X] FIO [ ] GA [ ] DA [ ] CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
5	Common Fill-Topsoil Analytic Test-EME #2	TEST REPORTS	2	1.6		A	N	

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE

Cornell Dubillier Electronics Superfund Site – Site Sample Review Form

Prepared For: CDE-OU1-Comfill-022813; CDE-OU1-Topsoil-022813
Prepared By: Ken Paisley
CC: Kim Lickfield
Date: 04/09/13

Waste Determination (if applicable): N/A (Site Backfill)

This memorandum summarizes the results of the internal data quality review assessment for the above referenced sample(s) conducted by Sevenson Environmental Services, Inc., personnel as part of its Corporate Data Quality Assurance Program. All results have been evaluated relative to Site ROD criteria and the site-specific Sampling and Analysis Plan. The analyses performed are of acceptable data quality.

Analytical results from the sample event were compared against RDCSCC and Project Action Limit (IGWSCC NJAC 7:26 "Clean Soil Criteria") to identify exceedances. The sample did not exceed the Site criteria*.

"I, the undersigned, as authorized by my company and under its Contract No. W912DQ-04-D-0023, certify that I have reviewed the data and find it to be as presented above.

Approved by:

Kenneth Paisley, CHMM
Technical Services Manager

* The laboratory's Minimal Detection Concentration (MDC) for Ra-226 was above the Project Concentration Limit Goal of 1.0 pCi/g. Per the approved Site UFP-QAPP, the concentrations of Bi-214 and Pb-214 were used to quantitate the Ra-226 activity (see attached).

RADIOLOGICAL DATA

Sample ID	Nuclide Reported by Gamma Spec	Nuclide Of Interest (NJAC 7:28-12)	Result (pCi/g)	Project Action Limit (pCi/g)
CDE-OU1-COMFILL-022813	Actinium - 228	Th - 232	0.351	2
CDE-OU1-COMFILL-022813	Bismuth - 214	Ra - 226	0.548	2
CDE-OU1-COMFILL-022813	Lead - 214	Ra - 226	0.86	2
CDE-OU1-COMFILL-022813	Thorium - 234	U - 238	1.024	14
CDE-OU1-TOPSOIL-022813	Actinium - 228	Th - 232	0	2
CDE-OU1-TOPSOIL-022813	Bismuth - 214	Ra - 226	1.047	2
CDE-OU1-TOPSOIL-022813	Lead - 214	Ra - 226	1.086	2
CDE-OU1-TOPSOIL-022813	Thorium - 234	U - 238	0.918	14

NOVA
QUALITY ASSURANCE
CONSULTING SERVICES

4 Mark Road
Suite A
Kenilworth NJ.07033
Office: (908) 688-6682
Fax: (908) 688-6687

SEVENSON ENVIRONMENTAL
333 Hamilton Blvd
South Plainfield, NJ 07080

Subject: Top Soil Testing Results

Dear Sir:

A Sample of on-site soils were delivered to the NOVA laboratory labeled as EME – New Egypt Top Soil Gamma 6981 for pH testing and Organic Content. Organic Content test was performed in accordance with ASTM Standard D2974, and the pH test was performed in accordance with ASTM Standard D4972. It was determined that the supplied materials contained 1.9% organic materials. The pH for the soil was 6.0. The natural moisture content of the material at time of arrival was 12.1%.

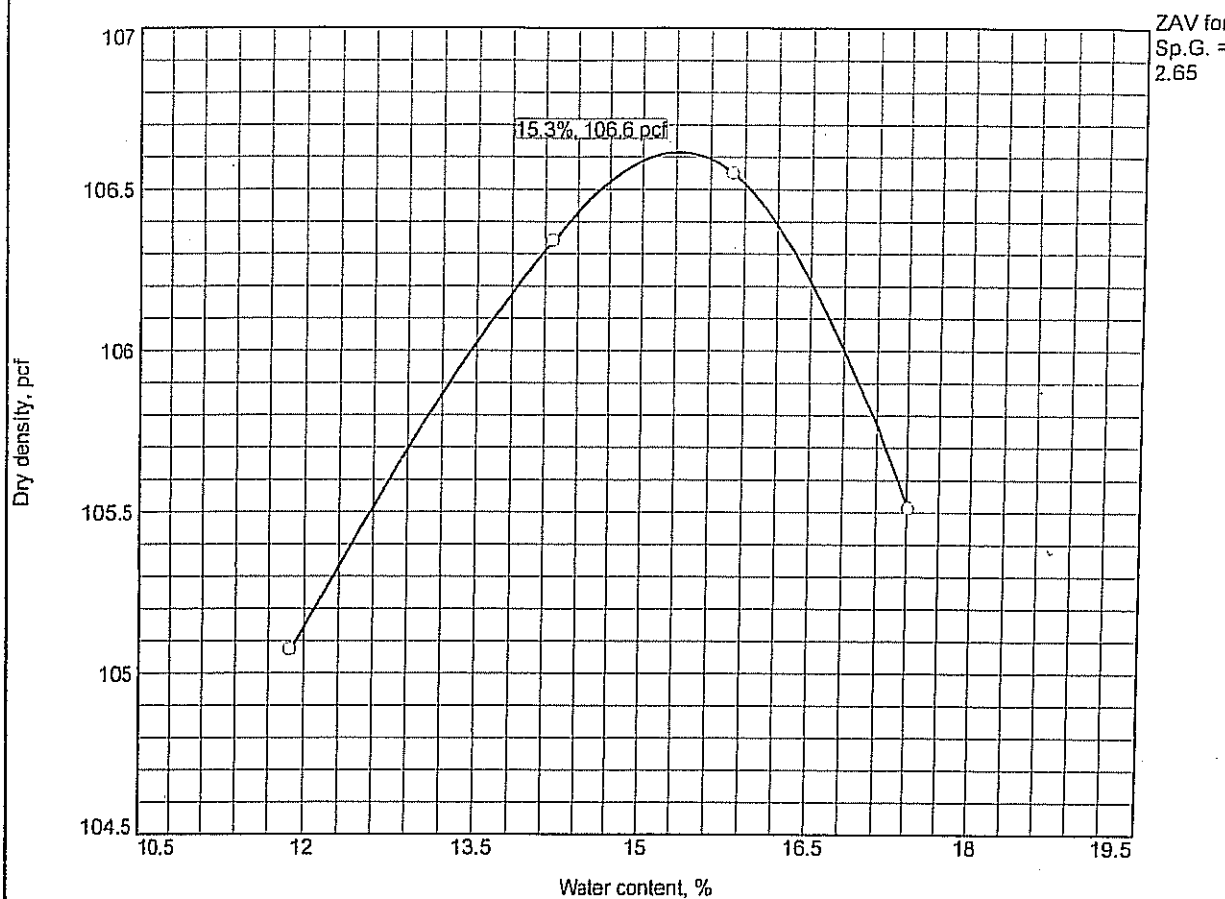
NOTE: This report does not reflect any environmental concerns with regards to usage of on-site materials.

We appreciate the opportunity to be of service to you on this project. Should you require any additional information please do not hesitate to contact our office.

Sincerely,
NOVA Quality Assurance Consulting Services, LLC

Dave Foster
Business Unit Manager

COMPACTION TEST REPORT



Test specification: ASTM D 1557-07 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
	SP-SM	A-3	12.1	2.65	NP	NP	0.9	5.5

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 106.6 pcf Optimum moisture = 15.3 %	Tan Brown Poorly Graded Sand with Silt

Project No. Client: Sevenson Environmental

Project: Sevenson Environmental

○Source of Sample: Common Fill Gamma -7531 Sample Number: Bulk - 1

Remarks:

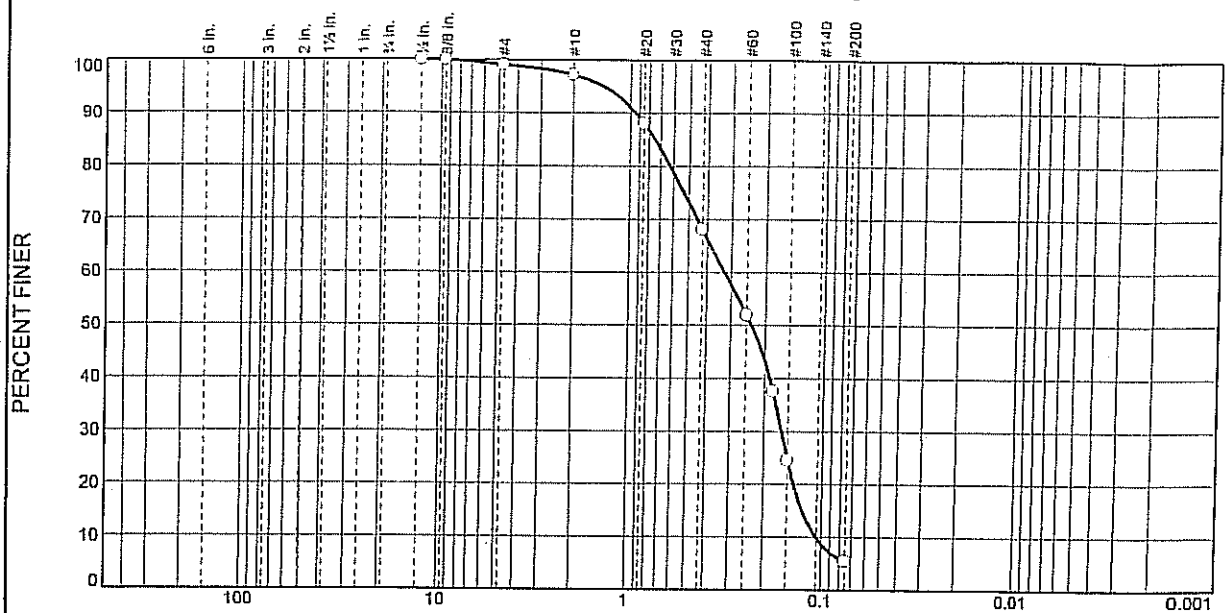
NOVA Quality Assurance Consulting Services, LLC

Kenilworth, New Jersey

Figure

Tested By: DF Checked By: DF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	1.9	29.1	62.6	5.5	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.5	100.0		
.375	100.0		
#4	99.1		
#10	97.2		
#20	88.0		
#40	68.1		
#60	51.9		
#80	37.5		
#100	24.4		
#200	5.5		

* (no specification provided)

Material Description

Tan Brown Poorly Graded Sand with Silt

Atterberg Limits (ASTM D 4318)

PL= NP LL= NP PI= NP

Classification

USCS (D 2487)= SP-SM AASHTO (M 145)= A-3

Coefficients

D_{90}= 0.9388 D_{85}= 0.7485 D_{60}= 0.3255
D_{50}= 0.2361 D_{30}= 0.1621 D_{15}= 0.1255
D_{10}= 0.1069 C_u= 3.04 C_c= 0.76

Remarks

Date Received: Date Tested: 3/4/13

Tested By: DF

Checked By: DF

Title: Laboratory Tech

Source of Sample: Common Fill Gamma -7531
Sample Number: Bulk - 1

Date Sampled:

NOVA Quality Assurance Consulting Services, LLC
Kenilworth, New Jersey

Client: Sevenson Environmental
Project: Sevenson Environmental

Project No: Figure

Report Date:
26-Mar-13 17:02

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sevenson Environmental Services Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Attn: Eric Tschudi

Work Order: M0273
Project : Cornell Dubilier Superfund Site OU1
Project #: G278

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M0273-01	CDE-OU1-COMFILL-022813	Soil	28-Feb-13 11:10	01-Mar-13 10:15
M0273-02	CDE-OU1-TOPSOIL-022813	Soil	28-Feb-13 11:40	01-Mar-13 10:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01B

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8B8548.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 13 Date Analyzed: 03/06/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	5.5	U
75-15-0	Carbon disulfide	5.5	U
75-09-2	Methylene chloride	2.3	J
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
78-93-3	2-Butanone	5.5	U
156-59-2	cis-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
71-43-2	Benzene	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-88-3	Toluene	5.5	U
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	5.5	U
1330-20-7	Xylene (Total)	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01B

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V8B8548.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 13 Date Analyzed: 03/06/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
107-02-8	Acrolein	28	U
107-13-1	Acrylonitrile	5.5	U
79-20-9	Methyl acetate	5.5	U
75-65-0	tert-Butyl Alcohol	11	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3857.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	190	U
111-44-4	Bis(2-chloroethyl)ether	190	U
95-57-8	2-Chlorophenol	190	U
95-48-7	2-Methylphenol	190	U
106-44-5	4-Methylphenol	190	U
621-64-7	N-Nitroso-di-n-propylamine	190	U
67-72-1	Hexachloroethane	190	U
98-95-3	Nitrobenzene	190	U
78-59-1	Isophorone	190	U
105-67-9	2,4-Dimethylphenol	190	U
120-83-2	2,4-Dichlorophenol	190	U
91-20-3	Naphthalene	190	U
87-68-3	Hexachlorobutadiene	190	U
91-57-6	2-Methylnaphthalene	190	U
77-47-4	Hexachlorocyclopentadiene	190	U
88-06-2	2,4,6-Trichlorophenol	190	U
95-95-4	2,4,5-Trichlorophenol	380	U
88-74-4	2-Nitroaniline	380	U
208-96-8	Acenaphthylene	190	U
606-20-2	2,6-Dinitrotoluene	190	U
83-32-9	Acenaphthene	190	U
51-28-5	2,4-Dinitrophenol	380	U
121-14-2	2,4-Dinitrotoluene	190	U
84-66-2	Diethylphthalate	190	U
86-73-7	Fluorene	190	U
534-52-1	4,6-Dinitro-2-methylphenol	380	U
86-30-6	N-Nitrosodiphenylamine	190	U
118-74-1	Hexachlorobenzene	190	U
87-86-5	Pentachlorophenol	380	U
85-01-8	Phenanthrene	190	U
120-12-7	Anthracene	190	U
86-74-8	Carbazole	190	U
84-74-2	Di-n-butylphthalate	190	U
206-44-0	Fluoranthene	190	U
129-00-0	Pyrene	190	U
85-68-7	Butylbenzylphthalate	190	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3857.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	190	U
56-55-3	Benzo(a)anthracene	190	U
218-01-9	Chrysene	190	U
117-81-7	Bis(2-ethylhexyl)phthalate	190	U
117-84-0	Di-n-octylphthalate	190	U
205-99-2	Benzo(b)fluoranthene	190	U
207-08-9	Benzo(k)fluoranthene	190	U
50-32-8	Benzo(a)pyrene	190	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	U
53-70-3	Dibenzo(a,h)anthracene	190	U
191-24-2	Benzo(g,h,i)perylene	190	U
92-52-4	1,1'-Biphenyl	190	U
98-86-2	Acetophenone	190	U
1912-24-9	Atrazine	190	U
103-33-3	Azobenzene	190	U
100-52-7	Benzaldehyde	190	U
92-87-5	Benzidine	190	U R
39638-32-9	Bis(2-chloroisopropyl)ether	190	U
105-60-2	Caprolactam	190	U
62-75-9	N-Nitrosodimethylamine	190	U

SVT 4.4.13

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E4H1766F.D/E4H1766R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	6.6	
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-01A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E2L8921F.D/E2L8921R.D

% Moisture: 13 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-01

Level (low/med): MED Date Received: 03/01/2013

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1370			P
7440-36-0	Antimony	0.35	U		P
7440-38-2	Arsenic	0.98			P
7440-39-3	Barium	5.0	B		P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.57			P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	0.64	B		P
7440-50-8	Copper	1.7			P
7439-92-1	Lead	2.4			P
7439-96-5	Manganese	8.5			P
7439-97-6	Mercury	0.025	B		CV
7440-02-0	Nickel	1.5	B		P
7782-49-2	Selenium	0.86	B		P
7440-22-4	Silver	0.23	B	U SU4-9	P
7440-28-0	Thallium	0.20	U		P
7440-62-2	Vanadium	6.7			P
7440-66-6	Zinc	3.8			P
57-12-5	Cyanide	0.42	U		CA

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-COMFILL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-01

Level (low/med): MED Date Received: 03/01/2013

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1370			P
7440-36-0	Antimony	0.35	U		P
7440-38-2	Arsenic	0.98			P
7440-39-3	Barium	5.0	B		P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	0.57			P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	0.64	B		P
7440-50-8	Copper	1.7			P
7439-92-1	Lead	2.4			P
7439-96-5	Manganese	8.5			P
7439-97-6	Mercury	0.025	B		CV
7440-02-0	Nickel	1.5	B		P
7782-49-2	Selenium	0.86	B		P
7440-22-4	Silver	0.23	B	U SU 4-9-13	P
7440-28-0	Thallium	0.20	U		P
7440-62-2	Vanadium	6.7			P
7440-66-6	Zinc	3.8			P
57-12-5	Cyanide	0.42	U		CA

Comments:

ilm13.01.13.A

M0273

FORM I - IN

SW846

Page 92 of 111

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02B

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8B8497.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 18 Date Analyzed: 03/05/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5.8	U J
74-87-3	Chloromethane	5.8	U J
75-01-4	Vinyl chloride	5.8	U J
74-83-9	Bromomethane	5.8	U J
75-00-3	Chloroethane	5.8	U J
75-69-4	Trichlorofluoromethane	5.8	U J
75-35-4	1,1-Dichloroethene	5.8	U J
67-64-1	Acetone	210	J
75-15-0	Carbon disulfide	6.5	J
75-09-2	Methylene chloride	2.6	J
156-60-5	trans-1,2-Dichloroethene	5.8	U J
1634-04-4	Methyl tert-butyl ether	5.8	U J
75-34-3	1,1-Dichloroethane	5.8	U J
78-93-3	2-Butanone	31	J
156-59-2	cis-1,2-Dichloroethene	5.8	U J
67-66-3	Chloroform	5.8	U J
71-55-6	1,1,1-Trichloroethane	5.8	U J
56-23-5	Carbon tetrachloride	5.8	U J
107-06-2	1,2-Dichloroethane	4.5	J
71-43-2	Benzene	190	J
79-01-6	Trichloroethene	5.8	U J
78-87-5	1,2-Dichloropropane	5.8	U J
75-27-4	Bromodichloromethane	5.8	U J
10061-01-5	cis-1,3-Dichloropropene	5.8	U J
108-88-3	Toluene	190	J
10061-02-6	trans-1,3-Dichloropropene	5.8	U J
79-00-5	1,1,2-Trichloroethane	5.8	U J
127-18-4	Tetrachloroethene	5.8	U J
124-48-1	Dibromochloromethane	5.8	U J
106-93-4	1,2-Dibromoethane	5.8	U J
108-90-7	Chlorobenzene	5.8	U J
100-41-4	Ethylbenzene	15	J
1330-20-7	Xylene (Total)	250	J
100-42-5	Styrene	64	J
75-25-2	Bromoform	5.8	U J

SCS 4-9-13

sam13.03.14.A

SW846

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02B

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V8B8497.D

Level: (TRACE/LOW/MED) LOW Date Received: 03/01/2013

% Moisture: not dec. 18 Date Analyzed: 03/05/2013

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U J
541-73-1	1,3-Dichlorobenzene	5.8	U J
106-46-7	1,4-Dichlorobenzene	5.8	U J
95-50-1	1,2-Dichlorobenzene	5.8	U J
96-12-8	1,2-Dibromo-3-chloropropane	5.8	U J
120-82-1	1,2,4-Trichlorobenzene	5.8	U J
107-02-8	Acrolein	29	U J
107-13-1	Acrylonitrile	5.8	U J
79-20-9	Methyl acetate	5.8	U J
75-65-0	tert-Butyl Alcohol	12	U J

SR 4-9-13

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3858.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	200	U
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
105-67-9	2,4-Dimethylphenol	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
87-68-3	Hexachlorobutadiene	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	410	U
88-74-4	2-Nitroaniline	410	U
208-96-8	Acenaphthylene	200	U
606-20-2	2,6-Dinitrotoluene	200	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	410	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	N-Nitrosodiphenylamine	200	U
118-74-1	Hexachlorobenzene	200	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U

SW846

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S3I3858.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 03/05/2013

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
92-52-4	1,1'-Biphenyl	200	U
98-86-2	Acetophenone	200	U
1912-24-9	Atrazine	200	U
103-33-3	Azobenzene	200	U
100-52-7	Benzaldehyde	200	U
92-87-5	Benzidine	200	U R SVE 4-09-13
39638-32-9	Bis(2-chloroisopropyl)ether	200	U
105-60-2	Caprolactam	200	U
62-75-9	N-Nitrosodimethylamine	200	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E4H1767F.D/E4H1767R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.3	P
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.2	
1024-57-3	Heptachlor epoxide	2.5	P
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	21	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: M0273 Mod. Ref No.: SDG No.: SM0273

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: M0273-02A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2L8922F.D/E2L8922R.D

% Moisture: 18 Decanted: (Y/N) N Date Received: 03/01/2013

Extraction: (Type) SONC Date Extracted: 03/05/2013

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/05/2013

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U
37324-23-5	Aroclor-1262	40	U
11100-14-4	Aroclor-1268	40	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-02

Level (low/med): MED Date Received: 03/01/2013

% Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950			P
7440-36-0	Antimony	0.50	B	U	P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	21.3			P
7440-41-7	Beryllium	0.36			P
7440-43-9	Cadmium	0.42			P
7440-47-3	Chromium	12.7			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	9.6			P
7439-92-1	Lead	21.2			P
7439-96-5	Manganese	84.3			P
7439-97-6	Mercury	0.024	B		CV
7440-02-0	Nickel	4.8			P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.084	B	U	P
7440-28-0	Thallium	0.21	U		P
7440-62-2	Vanadium	21.7			P
7440-66-6	Zinc	26.9			P
57-12-5	Cyanide	0.49	U		CA

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Lab Sample ID: M0273-02

Level (low/med): MED Date Received: 03/01/2013

% Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950			P
7440-36-0	Antimony	0.50	B	U [illegible]	P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	21.3			P
7440-41-7	Beryllium	0.36			P
7440-43-9	Cadmium	0.42			P
7440-47-3	Chromium	12.7			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	9.6			P
7439-92-1	Lead	21.2			P
7439-96-5	Manganese	84.3			P
7439-97-6	Mercury	0.024	B		CV
7440-02-0	Nickel	4.8			P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.084	B	U [illegible]	P
7440-28-0	Thallium	0.21	U		P
7440-62-2	Vanadium	21.7			P
7440-66-6	Zinc	26.9			P
57-12-5	Cyanide	0.49	U		CA

Comments:

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813S

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cyanide	75-125	6.0		0.49	U	5.4	109		CA

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO.

CDE-OU1-TOPSOIL-022813D

Lab Name: Spectrum Analytical, Inc. Contract: G2789024

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SM0273

Matrix (soil/water): SOIL Level (low/med): MED

% Solids for Sample: 82.0 % Solids for Duplicate: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cyanide		0.4900	U	0.4900	U			CA

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

March 26, 2013

Ms. Agnes Huntley
Spectrum Analytical, Featuring Hanibal Technology
175 Metro Center Blvd
Warwick, RI 02886

RE: Project: M0273
Pace Project No.: 3088755

Dear Ms. Huntley:
Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report reissued 3/26/13 to reflect the inclusion of results for the NORM list as per COC.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: M0273
Pace Project No.: 3088755

Pennsylvania Certification IDs
1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601
ACLASS DOD-ELAP Accreditation #: ADE-1544
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/TNI Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/TNI Certification #: LA080002
Louisiana/TNI Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: M0273
Pace Project No.: 3088755

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3088755001	CDE-OU1-COMFILL-022813	Solid	02/28/13 11:10	03/05/13 09:50
3088755002	CDE-OU1-TOPSOIL-022813	Solid	02/28/13 11:40	03/05/13 09:50

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: M0273
Pace Project No.: 3088755

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3088755001	CDE-OU1-COMFILL-022813	EPA 901.1m	RMK	10
3088755002	CDE-OU1-TOPSOIL-022813	EPA 901.1m	RMK	10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: M0273
Pace Project No.: 3088755

Method: EPA 901.1m
Description: 901.1 Gamma Spec
Client: Spectrum Analytical, Inc. - Agawam, MA
Date: March 26, 2013

General Information:
2 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: M0273
Pace Project No.: 3088755

Sample: CDE-OU1-COMFILL-022813 Lab ID: 3088755001 Collected: 02/28/13 11:10 Received: 03/05/13 09:50 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Bismuth-212	EPA 901.1m	0.351 ± 0.901 (1.572)	pCi/g	03/22/13 13:25	14913-49-6	
Bismuth-214	EPA 901.1m	0.548 ± 0.175 (0.769)	pCi/g	03/22/13 13:25	14733-03-0	
Lead-212	EPA 901.1m	0.621 ± 0.188 (0.168)	pCi/g	03/22/13 13:25	15092-94-1	
Lead-214	EPA 901.1m	0.860 ± 0.210 (0.125)	pCi/g	03/22/13 13:25	15067-28-4	
Potassium-40	EPA 901.1m	6.952 ± 1.587 (0.592)	pCi/g	03/22/13 13:25	13966-00-2	
Radium-226	EPA 901.1m	2.890 ± 1.493 (1.767)	pCi/g	03/22/13 13:25	13982-63-3	
Radium-228	EPA 901.1m	0.971 ± 0.262 (0.159)	pCi/g	03/22/13 13:25	15262-20-1	
Thallium-208	EPA 901.1m	0.134 ± 0.076 (0.095)	pCi/g	03/22/13 13:25	14913-50-9	
Thorium-234	EPA 901.1m	1.024 ± 0.781 (3.839)	pCi/g	03/22/13 13:25	15065-10-8	
Uranium-235	EPA 901.1m	0.227 ± 0.332 (0.554)	pCi/g	03/22/13 13:25	15117-96-1	

Sample: CDE-OU1-TOPSOIL-022813 Lab ID: 3088755002 Collected: 02/28/13 11:40 Received: 03/05/13 09:50 Matrix: Solid
PWS: Site ID: Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Bismuth-212	EPA 901.1m	0.000 ± 1.059 (1.921)	pCi/g	03/22/13 13:41	14913-49-6	
Bismuth-214	EPA 901.1m	1.047 ± 0.269 (0.741)	pCi/g	03/22/13 13:41	14733-03-0	
Lead-212	EPA 901.1m	0.446 ± 0.135 (0.143)	pCi/g	03/22/13 13:41	15092-94-1	
Lead-214	EPA 901.1m	1.086 ± 0.258 (0.193)	pCi/g	03/22/13 13:41	15067-28-4	
Potassium-40	EPA 901.1m	5.431 ± 1.514 (1.345)	pCi/g	03/22/13 13:41	13966-00-2	
Radium-226	EPA 901.1m	2.114 ± 1.794 (2.119)	pCi/g	03/22/13 13:41	13982-63-3	
Radium-228	EPA 901.1m	0.385 ± 0.216 (0.417)	pCi/g	03/22/13 13:41	15262-20-1	
Thallium-208	EPA 901.1m	0.136 ± 0.074 (0.089)	pCi/g	03/22/13 13:41	14913-50-9	
Thorium-234	EPA 901.1m	0.918 ± 0.756 (3.616)	pCi/g	03/22/13 13:41	15065-10-8	
Uranium-235	EPA 901.1m	0.276 ± 0.362 (0.621)	pCi/g	03/22/13 13:41	15117-96-1	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: M0273
Pace Project No.: 3088755

QC Batch: RADC/15109 | Analysis Method: EPA 901.1m
QC Batch Method: EPA 901.1m | Analysis Description: 901.1 Gamma Spec
Associated Lab Samples: 3088755001, 3088755002

METHOD BLANK: 558056 | Matrix: Solid
Associated Lab Samples: 3088755001, 3088755002

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Bismuth-212	-0.170 ± 0.593 (1.087)	pCi/g	03/22/13 13:57	
Bismuth-214	-0.011 ± 0.643 (0.472)	pCi/g	03/22/13 13:57	
Lead-212	-0.017 ± 0.693 (0.190)	pCi/g	03/22/13 13:57	
Lead-214	0.058 ± 0.077 (0.159)	pCi/g	03/22/13 13:57	
Potassium-40	-0.136 ± 5.433 (0.596)	pCi/g	03/22/13 13:57	
Radium-226	-0.073 ± 1.055 (1.616)	pCi/g	03/22/13 13:57	
Radium-228	-0.030 ± 1.206 (0.159)	pCi/g	03/22/13 13:57	
Thallium-208	-0.021 ± 2.244 (0.093)	pCi/g	03/22/13 13:57	
Thorium-234	-0.247 ± 5.673 (2.141)	pCi/g	03/22/13 13:57	
Uranium-235	0.024 ± 0.198 (0.373)	pCi/g	03/22/13 13:57	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: M0273
Pace Project No.: 3088755

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

TASK SPECIFIC QC CHECKLIST
Work Task: Field Documentation
Sevenson Checklist #008

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/28/13

Complete this form for each day samples are taken. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/A
Was all original field data recorded in black indelible ink?	X		
Were logbooks filled out properly, accurately recounting the day's events?	X		
Were all field forms completed and information accurately recorded?	X		
• Field Sampling Forms	X		
• Chain of Custody Forms	X		
• Field Log Books	X		
• Field Change Request Forms			X
• Additional Forms (list below)			X
Was field documentation forwarded to Sevenson office for peer/QC review?	X		
Were deficiencies reported to the Field Sampling Manager?			X

Notes/Comments

QC Inspector Name and Signature

ERIC TSCHUDI

Eric Tschudi

Date

2/28/13

DAILY CHEMICAL QUALITY CONTROL REPORT

Date: 2/28/13

Job Identification and Site Numbers: Cornell-Dubilier/G-278

Weather: 43°F OVERCAST

Subcontractors Present Onsite: NONE

Health and Safety Measures Necessary for Planned Activities: BASIC PPE. LEVE D. WORK CLOTHES, HARD HAT, SAFETY GLASSES, BOOTS.

Health and Safety Violations and Corrective Actions: NONE

Planned Daily Activities: DRIVE TO NEW EGYPT, NJ TO EME FACILITY TO COLLECT COMFILL/TOPSOIL SAMPLE.

Description of Chemical Data Acquisition Work Performed: VOC, SVOC, PESTICIDES, PCBs, METALS, CYANIDE, RADIOLOGICAL.

Sample Shipments and Problems Regarding Sampling and Sample Shipments: NO PROBLEMS. SAMPLES SHIPPED VIA FEDEX TO MITKEM LABS. NO. LINGSTOWN, RI.

Chemical Parameter Measurement Problems: NONE

Contingency Sampling: NONE

Non-conformance Problems: NONE

Corrective Actions (including approvals): NONE

Initials of Personnel Performing Corrective Actions: NA

Implemented Chemical Quality Control Activities (including summary of feedback resulting from corrective actions taken): NA

CERTIFICATION: As Chemical Quality Control Manager, I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by key staff and have determined that all materials, equipment and workmanship are in strict compliance with the plans and specifications, except as my be noted above.

Signature 2/28/13 Date

TASK SPECIFIC QC CHECKLIST
Work Task: Packing, Storing, and Shipment of Samples
Sevenson Checklist #007

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/28/13

Complete this form for each cooler/shipment inspected. Answer each question by checking the appropriate column (yes, no, not observed (N/O), or not applicable (N/A)). If "no" is checked, provide an explanation of the non-compliance and associated corrective action(s).

	Yes	No	N/O	N/A
Were the samples handled according to the FSP and QAPP?	X			
Did the samples remain on ice or refrigerated (except for sample transfer from coolers or refrigerators) from collection until the cooler was taped for shipment?	X			
Were sample containers prepared for shipment (bubble-wrap, Zip-Lock™ bags, etc) per SAP procedures?	X			
Was a trip blank (for VOC samples only) and a temperature blank included in each cooler?	X			
Was loose ice double Zip-Lock™- bagged prior to placement in cooler?	X			
Was ice placed in equal proximity to all sample containers and the temperature blank to ensure samples arrive at lab at 4°C?	X			
Were Chain-of-Custody forms filled out accurately and completely, including the project name and number, sampling date and time, analytical parameters, preservatives, size and number of containers for each analytical parameter, and media sampled?	X			
Were Chain-of-Custody forms signed and dated by the preparer and the form taped to the inside of the cooler lid?	X			
Were signed and dated custody seals properly placed on the cooler and the cooler sealed with strapping tape?	X			
Was a shipping label attached to the cooler?	X			
Were COCs and shipping tracking labels faxed to lab?	X			

Notes/Comments

QC Inspector Name and Signature

ERIC TSERVUDI

Date

2/28/13

TASK SPECIFIC QC CHECKLIST
Work Task: Sample Cooler Shipment
Sevenson Checklist #010

Project Name/Job Number: Cornell-Dubilier/G-278
Inspection Date: 2/28/13

☐ **PREPARATORY PHASE**

Yes	*No*	*N/A*		*Comment*
☐	☐	☐	Have sample shipment procedures in the SAP been reviewed by all field sampling personnel?	
☐	☐	☐	Are sufficient numbers of clean, hard plastic coolers available onsite to meet current sampling schedule?	
☐	☐	☐	Are sufficient packing supplies (i.e. Ziplock™ plastic bags, packing "peanuts", sealing tape, etc.) available onsite?	
☐	☐	☐	Are laboratory chain-of-custody forms, custody seals, and extra sample container labels available onsite?	
☐	☐	☐	Has a common carrier (Federal Express, UPS, etc.) been selected and have package pickup points and times been identified?	
☐	☐	☐	Will sample coolers be D.O.T. regulated for shipping purposes and are D.O.T. required shipping labels and logs available at the site?	
☐	☐	☐	Have the offsite primary and QA laboratories been contacted to verify anticipated sample collection and shipment schedules?	
☐	☐	☐	Does the primary and QA laboratory have a list of sample shipping site contacts should there be problems or questions?	
☐	☐	☐	Is an ice source available on or near the site?	

☐ **INITIAL PHASE** OR ☐ **FOLLOW-UP PHASE**

Yes	*No*	*N/A*		*Comment*
☒	☐	☐	Has a Preparatory Phase meeting been conducted?	
☒	☐	☐	Where sample containers received from the field properly labeled , prepared, and recorded in the field logbook and in the site sample summary log per the SAP?	
☒	☐	☐	Was the sample cooler inspected to verify that it was clean, undamaged, and had no external markings or shipping addresses unrelated to the project?	

☒	☐	☐	Was the cooler inspected to verify that the site name, address, telephone number and contact name was written in indelible ink on the interior of the cooler lid?	
☒	☐	☐	Was the cooler drain plug (if present) securely taped shut on both the interior and exterior sides?	
☒	☐	☐	Was a clean, new plastic garbage bag placed into the cooler as a secondary liner?	
☒	☐	☐	Where all samples, field duplicates, QA splits, and rinse blanks verified by checking sample labels against field logbook entries as chain-of-custody forms were completed?	
☒	☐	☐	Were chain-of-custody forms completed per SAP?	
☒	☐	☐	Were sample containers placed into separate Ziplock™ bags before being placed in an upright position in the cooler?	
☒	☐	☐	Was packing material placed between sample containers to prevent shifting or breakage during shipment?	
☒	☐	☐	Was a temperature blank placed in close proximity to sample containers?	
☒	☐	☐	If required, was double Ziplock™-bagged ice placed in the cooler in contact with all sample containers?	
☒	☐	☐	Was the outer garbage bag sealed with a twist-tie or knot?	
☒	☐	☐	Were chain-of-custody forms placed inside a Ziplock™ bag and taped to the inner lid of the cooler?	
☒	☐	☐	Was the closed cooler lid checked to verify a proper closure and was fiber-reinforced strapping tape placed around both of its ends at least twice?	
☒	☐	☐	Were handling labels and D.O.T. hazard labels (if required) placed on the outside of the cooler?	
☒	☐	☐	Were a minimum of two (front and side) completed custody seals placed across the lid opening to verify cooler integrity?	
☒	☐	☐	Was an address label with both the "shipped from" and "shipped to" addresses applied to the top of the cooler?	
☒	☐	☐	Was the common carrier airbill (or other shipping form) properly completed and attached to the cooler?	
☒	☐	☐	Was the "shipper's copy" of the airbill retained at the site and attached to the DCQCR?	
☒	☐	☐	Were all destination laboratories notified of sample shipments?	

Comments: _____

Sevenson Project Manager ERIC TSCHUDI _____ 2/28/13

Name Signature Date

QC Reviewer _____ _____ 2/28/13

Name Signature Date

CQC Systems Manager _____ _____

Name Signature Date

SPECTRUM ANALYTICAL, INC
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
TAT- Indicate Date Needed: 5DAY
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: KIM LICKFIELD
SEVENSON ENVIRONMENTAL
333 ~~LOCKPORT~~ HAMILTON BLVD
SOUTH PLAINFIELD, NJ 07080
908 769 5301
Project Mgr.: KIM LICKFIELD

Invoice To: SAME

P.O. No.: G2789024 RQN:

Project No.: G278
Site Name: CORNELL-DUBILIER
Location: SOUTH PLAINFIELD State: NJ
Sampler(s): E. TSCHUDI

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below:

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other

State specific reporting standards:

Lab Id:	Sample Id: (CDE-001-)	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC	SVOC	PEST.	PCBs	METALS	CYANIDE	RADIOLOGICAL	TEMPONLY
	COMFILL-022813	2/28/13	1110	C	SO	1	2			X	X	X	X	X	X	X	
	TOPSOIL-022813	2/28/13	1140	C	SO	1	2			X	X	X	X	X	X	X	
	TEMP BLANK					1											X

☒ E-mail to KLICKFIELD@SEVENSON.COM
EDD Format

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C

Relinquished by:	Received by:	Date:	Time:
[signature]	FED EX	2/28/13	1700

(54) 2/28/13

COMMON FILL AND TOP SOIL SAMPLES

0900 45°F OVERCAST. ERIC TSCHUDI, (SES) WILLIAM RAMBRANA (SES) AND BRIAN PACKOWSKI (USACE) LEAVE CDESS TRAILER COMPOUND FOR EME FACILITY IN NEW EGYPT, NJ. TO COLLECT COMMON FILL AND TOP SOIL SAMPLES. - WILL STOP AT FREEHOLD SOIL CONSERVATION DISTRICT OFFICE TO DROP OF PLANS.

1000 ARRIVE AT FREEHOLD TO DROP OFF PLANS.

1040 LEAVE FREEHOLD TO CONTINUE TO NEW EGYPT.

1100 ARRIVE TO EME FACILITY IN NEW EGYPT MEET WITH KIETH PRINCE OF EME. TEL.# 609 758 3400. K.P. DIRECTS US TO THE COMMON FILL PILL TO BE SAMPLED. CHECK PILE WITH GAMMA METER - LUDLUM 2221 WITH 44-10 PROBE. GENERAL AREA 6-8K CPM. 1 MIN COUNT: 6981 CPM.

1110 COLLECT 4 OZ VOA JAR DIRECTLY FROM PILE. SAMPLE CODE: CDE-001-COMFIL-022813, USING CLEAN STAINLESS STEEL SPOON AND FOIL PAN → FOR REMAINING ALIQUOTS. MIX ADDITIONAL SOIL MATERIAL IN PAN FILL 2-8 OZ SOIL JARS TO COMPLETE COMMON FILL SAMPLE. W.Z. FILLS 2-5 GAL BUCKETS FOR SOIL TESTING.

2/28/13

COMMON FILL AND TOP SOIL SAMPLES

2/28/13 (55)

MOVE TO ANOTHER AREA OF EME FACILITY TO SET UP TO SAMPLE THE TOP SOIL PILE. K.P. DIRECTS US TO A CERTAIN PILE. TAKE GAMMA READINGS. GEN. AREA = 6-8K CPM. 1-MIN. COUNT = 7531 CPM.

1140 COLLECT CDE-001-TOPSOIL-022813. FILL 4-OZ SOIL VOA DIRECTLY FROM PILE. USE FOIL PAN TO COLLECT SOIL MATERIAL FOR HOMOGENIZATION. MIX THOROUGHLY. FILL 2-8 OZ SOIL JARS. SAMPLES ARE PUT IN COOLER FOR TRIP BACK TO SES SITE. SAMPLES TO BE SHIPPED VIA FED EX OVERNIGHT TO MITKEM LABS: 646 CAMP AVE, NORTH KINGSTOWN, RHODE ISLAND, 02852. ED LAWLER CONTACT: 401 732 3400.

1210 RETURN TO SOUTH PLAINFIELD.

1300-1315 ARRIVE AT JOB SITE. BEGIN PAPERWORK TO PACK AND SHIP SAMPLES TO LAB. SAMPLES, BOTH COM FILL AND TOP SOIL WILL BE ANALYSED FOR THE FOLLOWING: VOC, SVOC, PEST., PCB, METALS, CYANIDE + RADIOLOGICAL.

2/28/13

From: (908) 769-5301
Eric Tschudi
Sevenson Environmental
333 Hamilton Blvd

South Plainfield, NJ 07080

Origin ID: LDJA

FedEx Express

J1310121219032 6

Ship Date: 28FEB13
ActWgt: 25.0 LB
CAD: 102252634/INET3370

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Sample Receiving
Mitkem Laboratories
646 Camp Avenue

NORTH KINGSTOWN, RI 02852

Ref # Sevenson
Invoice #
PO # Cornell
Dept #

FRI - 01 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 7948 6108 3882
0201

ZA NCOA

02852
RI-US
PVD

51BG2/DCF8/93AB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx Shipment Receipt

Address Information

Ship to:	**Ship from:**
Sample Receiving	Eric Tschudi
Mitkem Laboratories	Sevenson Environmental
646 Camp Avenue	333 Hamilton Blvd
NORTH KINGSTOWN, RI	South Plainfield, NJ
02852	07080
US	US
4017323400	9087695301

Shipment Information:
Tracking no.: 794861083882
Ship date: 02/28/2013
Estimated shipping charges: 38.63

Package Information
Service type: Priority Overnight
Package type: Your Packaging
Number of packages: 1
Total weight: 25 LBS
Declared Value: 0.00 USD
Special Services:
Pickup/Drop-off: Drop off package at FedEx location

Billing Information:
Bill transportation to: 175 Metro Center Blv-838
Your reference: Sevenson
P.O. no.: Cornell
Invoice no.:
Department no.:

Thank you for shipping online with FedEx ShipManager at fedex.com.

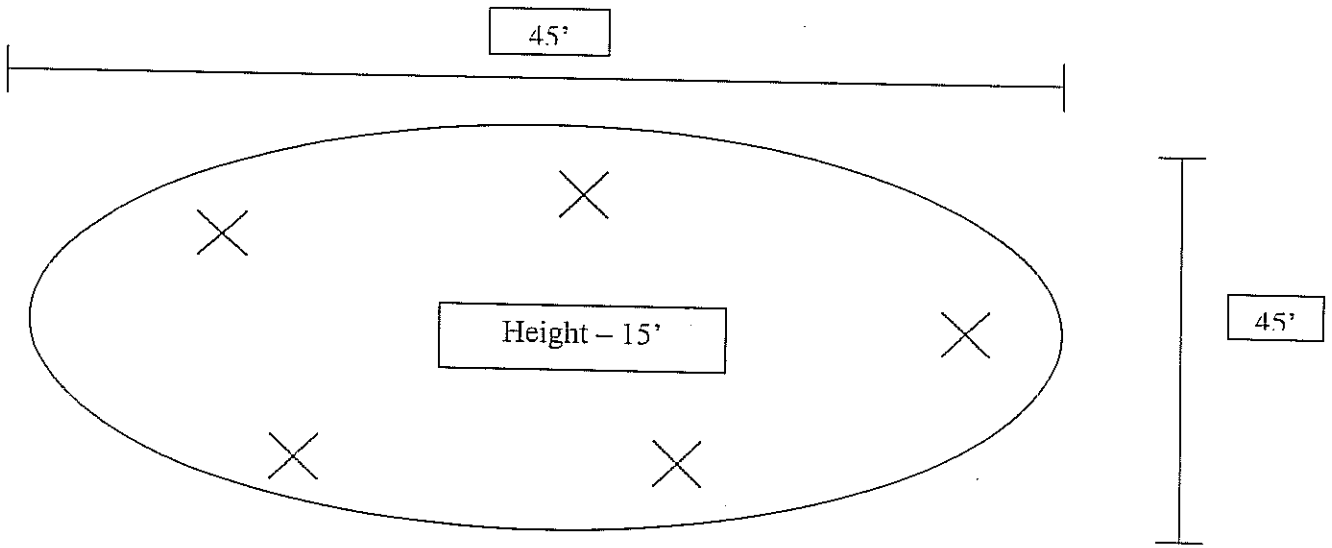
Please Note

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g., jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits; Consult the applicable FedEx Service Guide for details.

The estimated shipping charge may be different than the actual charges for your shipment. Differences may occur based on actual weight, dimensions, and other factors. Consult the applicable FedExService Guide or the FedEx Rate Sheets for details on how shipping charges are calculated.

EME Common Fill Soil Pile

Sampled: 2/28/2013



Ludlum 2221 Gamma Meter with 4410 probe used to measure radiological activity of stockpile. Radiological count background was measured at ~ 6.5 μR/hr, stockpile radiological count ranged from 6-8 μR/hr, and one minute radiological count was 7.5 μR/hr (obtained from location with the highest instantaneous Radiological count).

× → 5 discreet sample locations were composited and homogenized to represent the composition of the stockpile

NOVA
400. Mark Road,
Kenilworth, NJ 07033
Fax: 908 688 6687 www.usanova.com PH: 908 6886682

Testing and Inspection Report

Client : Sevenson Environmental services
Project Name: Cornell dobilier electronics superfund site
Project Address: 601-605, Hamilton boulevard
Project Address : South Plainfield, NJ
Contractor: Sevenson Environmental services

Date: 04/10/2013
Architect:
Construction Manager: Sevenson envir. services
Engineer:
Project #: 10218-1012080

A NOVA Engineering representative was present at the above referenced site for the following activities:

CONCRETE INSPECTION

___ CY of _____ psi with _____ concrete was placed at the following locations: Grade beam between _____ Footings _____ Beam _____
Foundation Walls_____ Coping _____ Slab _____
Results of required concrete tests are summarized on the attached report on concrete inspection.

SOIL COMPACTION INSPECTION

Structural Fill____ Back Fill __X____ Other( ) _____ was tested for compaction using soil moisture density gauge (# 34210) sand cone _____ or other ( ) at the following locations – Backyard fo property #419, Hancook street ,South Plainfield . Project Specifications require _85__% of maximum dry density as determined in accordance with ASTM D1557 ASTM D698____. Results are summarized on the attached report of soil compaction.

FOUNDATION EVALUATION

Shallow Foundation were checked as subgrade elevations determined by the contractor. Using a _____, dynamic cone penetrometer _____, or other method ( ). The following_____ were not _____ judged suitable for an allowable soil bearing pressure of____ as defined in the project specifications .

ADDITIONAL INSPECTIONS

Masonry_____ Structural Steel _____ Asphalt_____ Fireproofing_____
Other (Specify)_____
Remarks:

At the request of the client, the undersigned technician arrived at the project site to test and monitor backfill placement activities. General area of work was at House # 419, Hancook street ,South Plainfield. Contactor removed hazardous material from backyard up to subgrade elevation , determine by the engineer and filled with approved soil. Material was placed in specified lifts. A nuclear density gauge was used to verify that that backfill compaction. See attached field density worksheets for actual results. No other observation reported on this date.

Inspector's Name: _Jayesh shah_____ Inspector's Signature J. Shah. **Date: __04/10/2013_____**

NOTE: This report covers the locations of the work inspected and tested following recognized standards and does not constitute engineering opinion or project control. NOVA is not responsible for jobsite safety or safety inspections beyond NOVA personnel.

NOVA
QUALITY ASSURANCE
CONSULTING SERVICES

FIELD DENSITY SOIL TEST REPORT SUMMARY

Project Name: Cornell dobilier, S. Plainfield
Project No.: 10218-1012080
Project Location: 601,Hamilton Blvd.
Client:Sevenson environmental services
Contractor: Sevenson construction

Date: 04/10/2013

SG- Sub Grade

TEST INFORMATION			LABORATORY TEST			FIELD TEST			SPECIFIED % COMPACTION	COMPACTION RESULTS	
						NUCLEAR GAUGE					
Number	LOCATION (Specific Description)	Elevation	SOIL DESCRIPTION/ TEST DEPTH IN INCH	PROCTER	MOISTURE	DRY DENSITY	MOISTURE	% COMPACTION		PASS	FAIL
1	House#419 ,backyard ,location 1	SG	Gray sand– 8" inch thick	106.6	15.3	106.3	9.70	99.8	85	X	
2	House#419 ,backyard ,location 2	SG	Gray sand – 8" inch thick	106.6	15.3	105.6	10.40	99.1	85	X	
3	House#419 ,backyard ,location 3	SG	Gray sand– 8" inch thick	106.6	15.3	101.1	9.90	94.9	85	X	

Nuclear Density Gauge Info: Make : Troxler 3430
Serial No. 34210

Comments: _____

Inspected name - Jayesh shah , Inspector signature -

NOVA Rep: Jayesh shah J. Shah.

NOVA
400. Mark Road,
Kenilworth, NJ 07033
Fax: 908 688 6687 www.usanova.com PH: 908 6886682

Testing and Inspection Report

Client : Sevenson Environmental services
Project Name: Cornell dobilier electronics superfund site
Project Address: 601-605, Hamilton boulevard
Project Address : South Plainfield, NJ
Contractor: Sevenson Environmental services

Date: 04/25/2013
Architect:
Construction Manager: Sevenson envir. services
Engineer:
Project #: 10218-1012080

A NOVA Engineering representative was present at the above referenced site for the following activities:

CONCRETE INSPECTION

___ CY of _____ psi with _____ concrete was placed at the following locations: Grade beam between _____ Footings _____ Beam _____
Foundation Walls_____ Coping _____ Slab _____
Results of required concrete tests are summarized on the attached report on concrete inspection.

SOIL COMPACTION INSPECTION

Structural Fill____ Back Fill __X____ Other( ) _____ was tested for compaction using soil moisture density gauge (# 34210) sand cone _____ or other ( ) at the following locations – Part-B, Backyard of property #218(413, Hancook street),South Plainfield . Project Specifications require _85__% of maximum dry density as determined in accordance with ASTM D1557 ASTM D698____. Results are summarized on the attached report of soil compaction.

FOUNDATION EVALUATION

Shallow Foundation were checked as subgrade elevations determined by the contractor. Using a _____, dynamic cone penetrometer _____, or other method ( ). The following_____ were not _____judged suitable for an allowable soil bearing pressure of ____ as defined in the project specifications .

ADDITIONAL INSPECTIONS

Masonry_____ Structural Steel _____ Asphalt_____ Fireproofing_____
Other (Specify)_____
Remarks:

At the request of the client, the undersigned technician arrived at the project site to test and monitor backfill placement activities. General area of work was at(properties 218) back yard of House # 413,Part-B , Hancook street ,South Plainfield. Contactor removed hazardous material from backyard up to subgrade elevation , determine by the engineer and filled with approved soil. Material was placed in specified lifts. A nuclear density gauge was used to verify that that backfill compaction. See attached field density worksheets for actual results and drawing for location.
No other observation reported on this date.

Inspector's Name: _Jayesh shah_____ Inspector's Signature J. Shah **Date: __04/25/2013_____**

NOTE: This report covers the locations of the work inspected and tested following recognized standards and does not constitute engineering opinion or project control. NOVA is not responsible for jobsite safety or safety inspections beyond NOVA personnel.

NOVA
QUALITY ASSURANCE
CONSULTING SERVICES

FIELD DENSITY SOIL TEST REPORT SUMMARY

Project Name: Cornell dobilier, S. Plainfield
Project No.: 10218-1012080
Project Location: 601,Hamilton Blvd.
Client: Sevenson environmental services
Contractor: Sevenson construction

Date: 04/25/2013

SG- Sub Grade

TEST INFORMATION			LABORATORY TEST			FIELD TEST			SPECIFIED % COMPACTION	COMPACTION RESULTS	
						NUCLEAR GAUGE					
Number	LOCATION (Specific Description)	Elevation	SOIL DESCRIPTION/ TEST DEPTH IN INCH	PROCTER	MOISTURE	DRY DENSITY	MOISTURE	% COMPACTION		PASS	FAIL
1	House#413,Property 218,Part-B backyard ,location 1	SG	Gray sand– 8" inch thick	106.6	15.3	105.7	9.60	99.2	85	X	
2	House#413,Property 218,Part-B backyard ,location 2	SG	Gray sand – 8" inch thick	106.6	15.3	105.4	9.90	98.9	85	X	
3	House#413,Property 218,Part-B backyard ,location 3	SG	Gray sand– 8" inch thick	106.6	15.3	105.2	9.40	98.7	85	X	
4	House#413,Property 218,Part-B backyard , location 4	SG	Gray sand– 8" inch thick	106.6	15.3	103.2	9.90	96.8	85	X	
5	House#413,Property 218,Part-B backyard , location 5	SG	Gray sand– 8" inch thick	106.6	15.3	106.4	10.9	99.8	85	X	

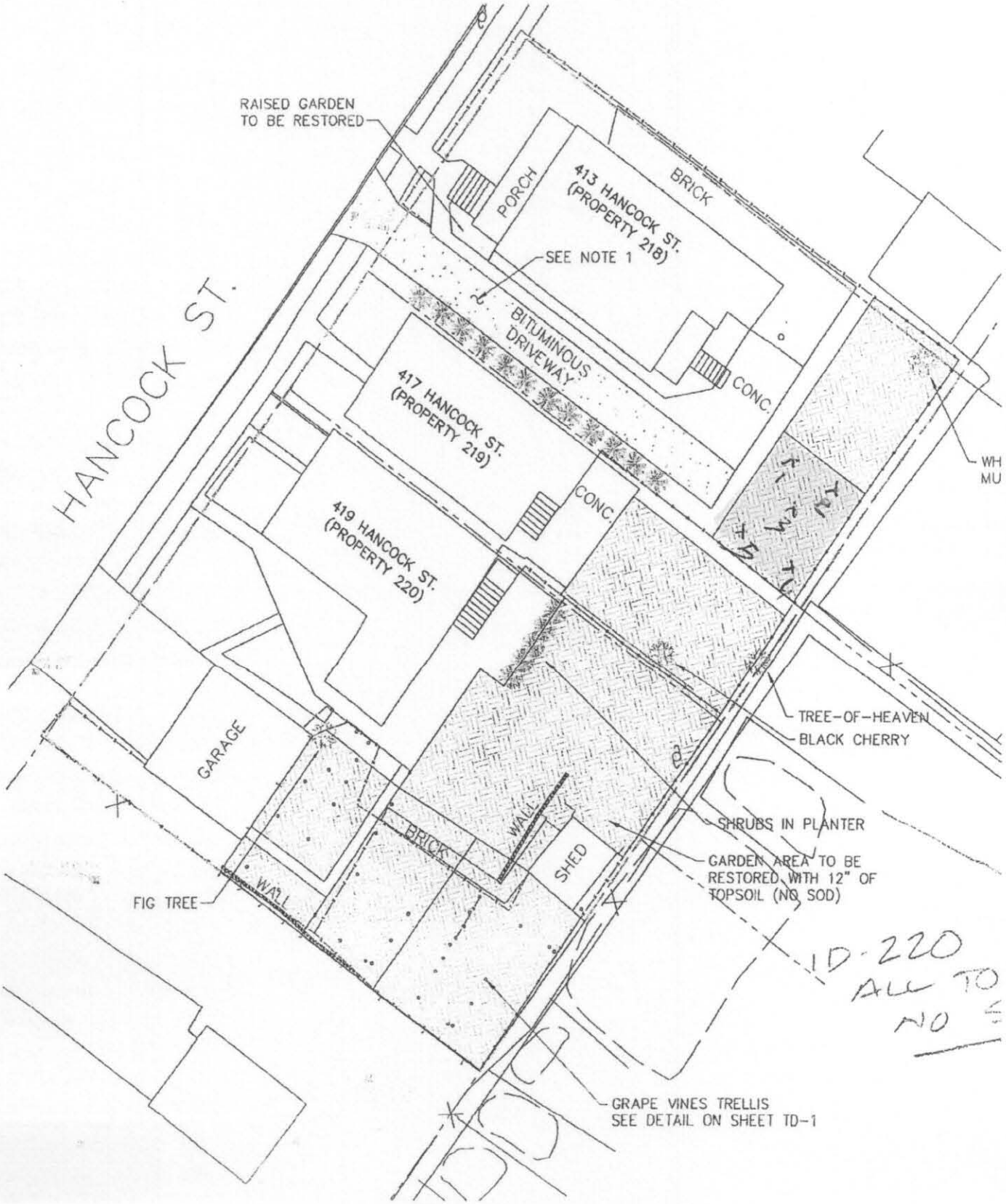
Nuclear Density Gauge Info: Make : Troxler 3430
Serial No. 34210

Comments: _____

Inspected name - Jayesh shah , Inspector signature -

NOVA Rep: Jayesh shah J. Shah

04/25/13


RAISED GARDEN
TO BE RESTORED
PORCH
413 HANCOCK ST.
(PROPERTY 218)
BRICK
SEE NOTE 1
HANCOCK ST.
BITUMINOUS
DRIVEWAY
CONC.
417 HANCOCK ST.
(PROPERTY 219)
419 HANCOCK ST.
(PROPERTY 220)
CONC.
GARAGE
BRICK
WALL
SHED
WALL
FIG TREE
TREE-OF-HEAVEN
BLACK CHERRY
SHRUBS IN PLANTER
GARDEN AREA TO BE
RESTORED WITH 12" OF
TOPSOIL (NO SOD)
GRAPE VINES TRELLIS
SEE DETAIL ON SHEET TD-1
ID-220
ALL TO
NO

Atlantic Engineering Laboratories, Inc.
41 Murray Street
Rahway, NJ 07065
www.aelinc.net
Office: 732-815-0400
Fax: 732-815-0422

Project Sign-In Sheet

Client: Sevenson Environmental

Project: OU-1 Remedial Design

Date: 7/30/13 Time In: 7:00

Time Out: 11:00

Total Hours Worked: 4 **Overtime:**

Description of Work Performed:

- ☐ Concrete Inspection Field, Yds. / Cyls made:
- ☐ Concrete Inspection Plant, Yds. Inspected:
- ☐ Masonry Inspection, Samples Made:
- ☐ Grout Inspection, Samples Made Today:
- ☐ Reinforcing Steel Inspection
- ☐ Footing Bottom Inspection
- ☑ Soil Compaction Testing
- ☐ No. of Soil Samples Picked Up:
- ☐ Soil Boring / Test Pits
- ☐ Asphalt Compaction Testing
- ☐ Structural Steel Inspection:
- ☐ Visual Welding ☐ PT ☐ MT ☐ UT
- ☐ Plumbness ☐ Torque Testing of Bolts
- ☐ Fireproofing Inspection. No. of Density Samples: 2 Hours - 27833 - 27834
- ☐ Adhesion & Cohesion Test. No. of Tests done: 2 Hours
- ☐ Paint Thickness Testing
- ☐ Anchor Bolt Pull Test, No. of Tests Done:
- ☐ Floor Flatness Testing
- ☐ Swiss Hammer / Windsor Probe / Coring:
- ☐ Miscellaneous Testing:
- ☑ Report Provided: ☐ No ☑ Yes, if yes, ☑ Written or ☐ Verbal
- ☐ Did Client Schedule follow-up Inspection through the Office? ☐ No ☑ Yes

Sign: Inspector: **Sign: Client:**

AELNY

Atlantic Engineering Laboratories of New York

ACCREDITED

AASHTO Accredited

Registered Special Inspection Agency #1381
ertified Special Inspection Agency SIA-242-NY

DAILY FIELD REPORT

ıt: Sevenson environmental **Date:** 7/30/13
ect: OU-1 Remedial Design **Project #:**
ect Address: Cornell - Dubilier electronic Superfund site **Report #:**

equested by the client, a representative of Atlantic Engineering Laboratories of New York Inc. (AELNY) arrived on site to perform the following services:

tion of Work Inspected: See attached drawing for location grid-1, grid 2

Concrete Testing
(See Attached Report for Details)

Reinforcing Steel Inspection
Rebar was checked for compliance with approved project and/or shop drawings for clearance, cover, lap splices, ties, placement and cleanliness.
Drawings Used:
Drawing Date:

Soil Compaction Testing
(See Attached Report for Details) 27133

Footing Bottom Inspection Location: 27834
Soil materials encountered at footing sub grades were verified for the design allowable soil bearing capacity of _____ pounds per square foot (psf).

Masonry Testing
(See Attached Report for Details)

Other (Specify):

Summary of Observations: Compacted lift at above location was tested for compaction by using a soil moisture density gauge.

Discrepancies Observed : ☐ Yes ☒ No
Summary of Discrepancies:

Technician : Bharat M. Patel
ACI # :

41 Murray Street * Rahway, NJ 07065 * Tel: 732-815-0400 * Fax: 732-815-0422

AEL

tlantic Engineering Laboratories, Inc.

SOIL COMPACTION TEST REPORT

Client: Seven [illegible] **Date:** 7/30/13

Project: OU-1 Remedial [illegible] [illegible] Sachs Fund Site **Project #:**

Per the request of the client, a representative of Atlantic Engineering Laboratories, Inc. (AEL) arrived at the above noted site to perform soils compaction testing. The following is a summary of our observations:

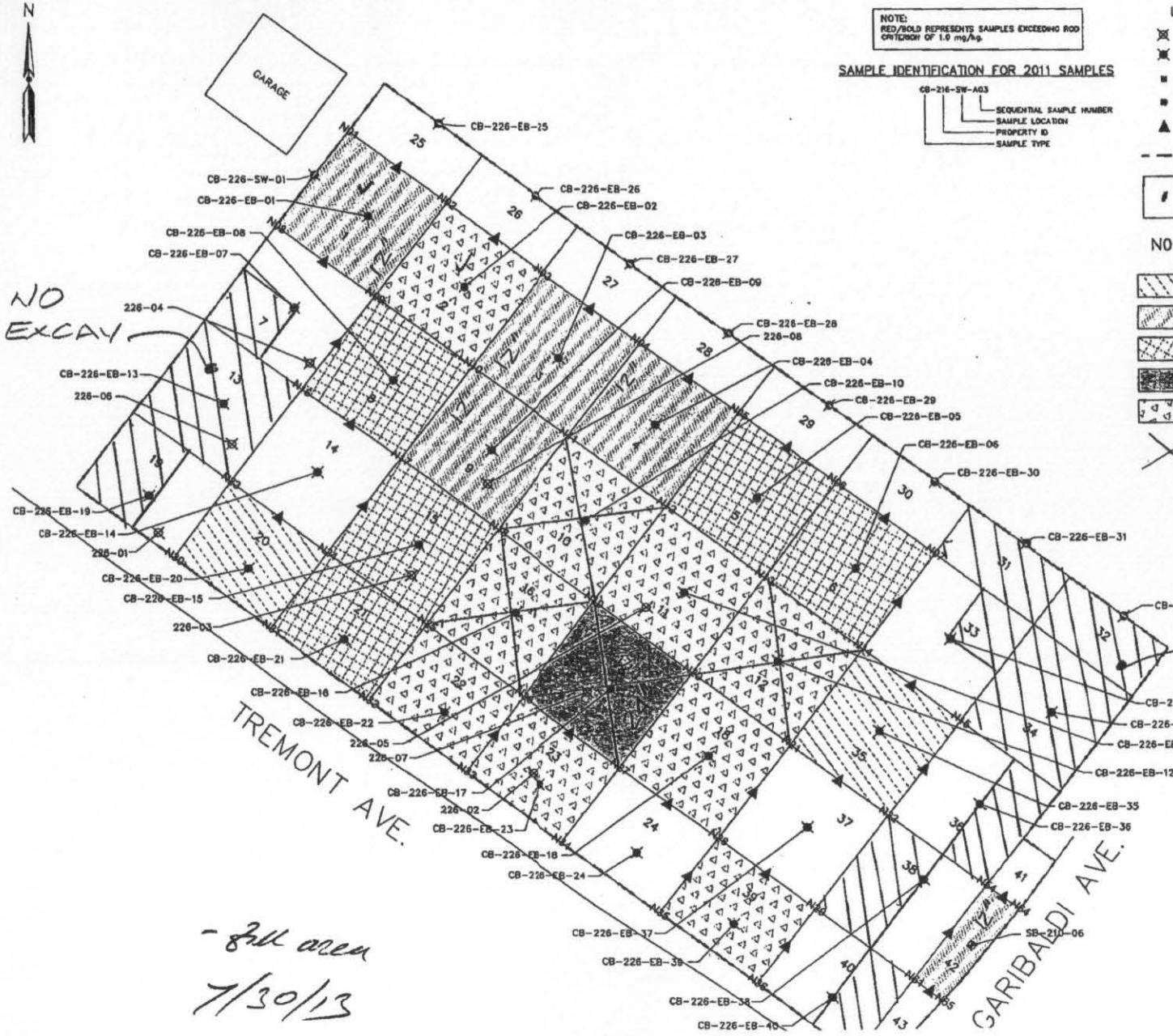
Location and Description of Work Performed: See attached [illegible] for location (grid-1, grid 2, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Test #	Soil Moisture	Optimum Moisture	Field Dry Density (PCF)	Maximum Dry Density	Percent Comp.	Percent Comp. Required	Pass/ Fail	Test Elevation	Location
1	15.7	15.3	93.7	106.6	87.8	85	Pass	1 below [illegible]	grid #1
2	15.9	"	92.9	"	87.1	"	"	To [illegible]	"
3	15.1	"	93.4	"	87.3	"	"	1 below [illegible]	grid #2
4	16.3	"	92.5	"	86.7	"	"	To [illegible]	"

Diagram Attached: Yes ☑ No ☐

Technician [illegible]

41 Murray Street • Rahway, NJ 07065 • Office: 732.815.0400 • Fax: 732.815.0422



NOTE:
RED/BOLD REPRESENTS SAMPLES EXCEEDING ROD CRITERION OF 1.0 mg/kg.

SAMPLE IDENTIFICATION FOR 2011 SAMPLES

CB-216-SW-A03
- SEQUENTIAL SAMPLE NUMBER
- SAMPLE LOCATION
- PROPERTY ID
- SAMPLE TYPE

LEGEND FOR 2011/2012 SAMPLES

- 2011 SOIL SAMPLE LOCATION AND ID
- 2011 CONFIRMATORY SOIL SAMPLE LOCATION AND ID
- HISTORIC SOIL SAMPLE LOCATION
- HISTORIC SOIL SAMPLE LOCATION
- SIDEWALL SAMPLE (SEE NOTE 3)
- LIMIT OF CONSTRUCTION
- # REPRESENTS EXCAVATION GRID NUMBER
- N01 REPRESENTS EXCAVATION POINT (SEE TABLE 4A ON FIGURE-4C FOR COORDINATES)
- INDICATES EXCAVATION TO 6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO 12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO 18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO 24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO BEDROCK (SEE DEPTH TO BEDROCK TABLE (PRIMARY) ON FIGURE-4C)

X TSCA GRIDS

NOTES:

1. LOCATIONS SAMPLED IN 2011 AND 2012 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
2. SEE FIGURE-4C FOR ANALYTICAL RESULTS AND ASSOCIATED DEPTH INTERVALS FOR PROPERTY 226.
3. CONTRACTOR SHALL COLLECT CONFIRMATION SIDEWALL SAMPLES ALONG THE EXCAVATION SIDEWALLS AS INDICATED. EXCAVATION SHALL PROCEED TO THE SECONDARY EXCAVATION AREAS AS SHOWN ON FIGURE-4B ONLY AS NECESSARY BASED ON RESULTS OF CONFIRMATION SAMPLING AND AT THE DIRECTION OF THE COR.
4. GRIDS 10, 12, 16, AND 17 CONTAIN POTENTIAL TSCA MATERIAL.
5. COORDINATES HAVE BEEN PROVIDED FOR CERTAIN EXCAVATION AREA CORNERS. IF CONTRACTOR'S SURVEYED LOCATION OF AN EXCAVATION CORNER IS NOT CONSISTENT WITH THE LOCATION SHOWN ON THE CONTRACT DRAWINGS, THE EXCAVATION AREA SHALL BE ADJUSTED IN THE FIELD TO MATCH ACTUAL SITE

ARCADIS

REVISIONS:

No.	Date

U.S. Army Corps of Engineers
KANSAS CITY

PROJECT NAME: OU-1 REMEDIAL DESIGN

SHEET TITLE: PROPERTY 226

JOB NO:

NOVA 27833

www.usanova.com

DAILY FIELD REPORT

Project Name: CORNELL DUBEITR	NOVA Project No: 10218 1012080.
Client's Name: Seven Son Environmental	Day / Date: 08/05/13 MONDAY
Report of: Soil	NOVA Rep: Nalin Shah

GENERAL INSTRUCTIONS: 1. Summary of contractor's operations. Location and approximate quantities placed (refer to plans, make sketch). Work completed. Delays or threatening delays. Contractor's force and equipment, as applicable. 2. Summary of inspector's participation and observations. Test performed-summary of results and acceptability. Summary of discussions with contractor or resident engineer. 3. Specification variations. Suggested by whom-action taken. 4. Acknowledgment of instructions received from any source (including NOVA) 5. Serious accidents. 6. Other important occurrence. 7. Name, title and position of supervisory personnel and subcontractors with whom you deal. Location of field office-contact phone (initial report only-indicate).

TREMONT AVE (Attached Drawing)

Soil Compaction test were Performed on above location. Contractor Backfill with Imported Sand and Compacted well till soil was firm and achieve Required specified Compaction. See Attached Report for Details.

STATEMENTS IN THIS FIELD REPORT ARE SUBJECT TO NOVA'S PRINCIPAL REVIEW

NOVA Rep: N. Shah 8 to 11 PM.

FIELD DENSITY TEST WORKSHEET

NOVA
www.usanova.com

Date: 08/05/13
Page 2 of 3

Project Name: CORNELL DUBILIR
Project No: 10218101 2080
Project Location: South plain field NJ
Client: Seven Son Eng
Contractor: Seven Son

TEST INFORMATION			LABORATORY TEST				FIELD TEST					COMPACTION RESULTS		
Number	LOCATION (Specific Description)	Elevation	PROCTOR I.D.	SOIL DESCRIPTION	MAX DRY DENSITY (PCF)	% OPTIMUM MOISTURE	TEST DEPTH (INCHES)	DRY DENSITY (PCF)	% MOISTURE CONTENT	% COMPACTION	SPECIFIED % COMPACTION	PASS	FAIL	SPECIFIED % MOISTURE
1	TREMONT. AVE GRID. #10	-16"		Imported Sand	106.6	15.3	12"	96.7	9.1	90.5	85%	✓		Ext
2	" " #16	-16"		" "	"	"	"	105.6	9.0	98.8	"	✓		"
3	" " #10	-8"		" "	"	"	"	101.2	7.5	95.0	"	✓		"
4	" " #16	-8"		" "	"	"	"	97.5	10.0	91.5	"	✓		"
5	" " #6	Final		" "	"	"	"	97.0	11.0	91.0	"	✓		"
6	" " #35	"		" "	"	"	"	104.0	16.0	97.6	"	✓		"
7	" " #12	-16"		" "	"	"	"	105.5	8.5	99.0	"	✓		"
8	" " #11	Final		" "	"	"	"	95.8	8.9	89.9	"	✓		"

Type of Earth Moving Equip. & No. of Units: Dozer
Type of Compaction Equip. & No. of Units: Small Smooth Drum V. Roller
Fill Lift Thickness (Typical): 8" approx
Method of Adding Moisture: N/A
Number of Passes by Compactor (Typical):
NOVA Observations ☐ Full-Time ☑ Part-Time
Proctor Type: ☐ Standard (ASTM D698-00a) ☑ Modified (ASTM D1557-00)
ASTM Test Method:
☐ Sand Cone (D1556-00)
☑ Nuclear Density/Moisture (D2922-96e1/D3017-96e1)
☐ Drive Ring (D2937-00)
☐ Moisture Content (D2216-98)

Nuclear Density Gauge Info:
Make TROXLER
Model 3430
Serial No. 34210
Daily Standard Count:
Density 106.6
Moisture 15.3

Comments:

NOVA Rep: Malin Shah

NOVA

www.usanova.com

FIELD DENSITY TEST WORKSHEET

Date: 08/05/13

Page 3 of 3

Project Name: CORNELL DUBILIER

Project No: 10219 101280

Project Location: South Plainfield NJ

Client: Sevenson

Contractor: Sevenson

TEST INFORMATION			LABORATORY TEST				FIELD TEST					COMPACTION RESULTS		
Number	LOCATION (Specific Description)	Elevation	PROCTOR I.D.	SOIL DESCRIPTION	MAX DRY DENSITY (PCF)	% OPTIMUM MOISTURE	TEST DEPTH (INCHES)	DRY DENSITY (PCF)	% MOISTURE CONTENT	% COMPACTION	SPECIFIED % COMPACTION	PASS	FAIL	SPECIFIED % MOISTURE
9	TREMONT AVE GRID H 17	Final 1.6		Imported Sand.	106.6	15.3	12"	101.3	11.1	95.1	95%	✓		31+
10	" " H 23	"		" "	"	"	"	102.7	13.1	95.8	"	✓		"
11	" " H 19	"		" "	"	"	"	90.2	16.6	85.1	"	✓		"
12	" " H 39	"		" "	"	"	"	93.8	15.1	88.0	"	✓		"
13	" " H 10	"		" "	"	"	"	95.4	11.8	90.0	"	✓		"
14	" " H 16	"		" "	"	"	"	104.4	13.5	98.0	"	✓		"
15	" " H 12	Final 1.6		" "	"	"	"	101.8	13.8	95.5	"	✓		"
16	" " H 12	"		" "	"	"	"	102.8	9.9	96.5		✓		"

Type of Earth Moving Equip. & No. of Units: _____

Type of Compaction Equip. & No. of Units: _____

Fill Lift Thickness (Typical): 5" approx

Method of Adding Moisture: N/A

Number of Passes by Compactor (Typical): _____

NOVA Observations ☐ Full-Time ☑ Part-Time

Proctor Type: ☐ Standard (ASTM D698-00a) ☑ Modified (ASTM D1557-00)

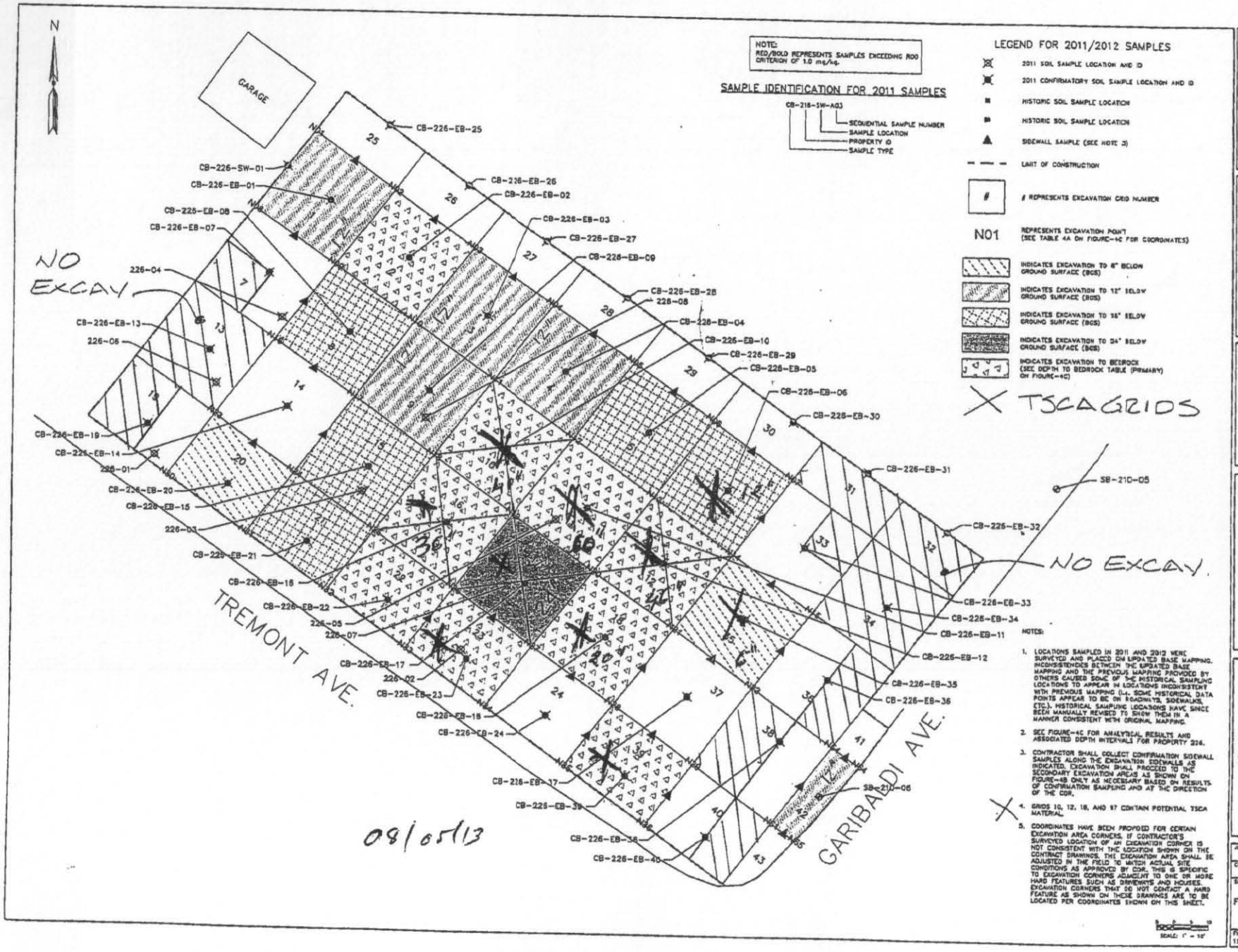
ASTM Test Method:
- ☐ Sand Cone (D1556-00)
- ☑ Nuclear Density/Moisture (D2922-96e1/D3017-96e1)
- ☐ Drive Ring (D2937-00)
- ☐ Moisture Content (D2216-98)

Nuclear Density Gauge Info: Make TROXLER, Model 3430, Serial No. 34216

Daily Standard Count: Density 106.6, Moisture 15.3

Comments: Job well done.

NOVA Rep: Nalin Shah



NOTE:
RED/BOLD REPRESENTS SAMPLES EXCEEDING RDO CRITERION OF 1.0 mg/kg.

SAMPLE IDENTIFICATION FOR 2011 SAMPLES

CB-216-SW-A03
- SEQUENTIAL SAMPLE NUMBER
- SAMPLE LOCATION
- PROPERTY ID
- SAMPLE TYPE

LEGEND FOR 2011/2012 SAMPLES

- 2011 SOIL SAMPLE LOCATION AND ID
- 2011 CONFIRMATORY SOIL SAMPLE LOCATION AND ID
- HISTORIC SOIL SAMPLE LOCATION
- HISTORIC SOIL SAMPLE LOCATION
- SIDEWALL SAMPLE (SEE NOTE 3)
- LIMIT OF CONSTRUCTION
- # REPRESENTS EXCAVATION GRID NUMBER
- N01 REPRESENTS EXCAVATION POINT (SEE TABLE 4A ON FIGURE-4C FOR COORDINATES)
- INDICATES EXCAVATION TO 6" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO 12" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO 18" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO 24" BELOW GROUND SURFACE (BGS)
- INDICATES EXCAVATION TO BEDROCK (SEE DEPTH TO BEDROCK TABLE (PRIMARY) ON FIGURE-4C)

NOTES:

1. LOCATIONS SAMPLED IN 2011 AND 2012 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
2. SEE FIGURE-4C FOR ANALYTICAL RESULTS AND ASSOCIATED DEPTH INTERVALS FOR PROPERTY 226.
3. CONTRACTOR SHALL COLLECT CONFIRMATION SIDEWALL SAMPLES ALONG THE EXCAVATION SIDEWALLS AS INDICATED. EXCAVATION SHALL PROCEED TO THE SECONDARY EXCAVATION AREAS AS SHOWN ON FIGURE-4B ONLY AS NECESSARY BASED ON RESULTS OF CONFIRMATION SAMPLING AND AT THE DIRECTION OF THE COR.
4. GRIDS 10, 12, 18, AND 97 CONTAIN POTENTIAL TSCA MATERIAL.
5. COORDINATES HAVE BEEN PROVIDED FOR CERTAIN EXCAVATION AREA CORNERS. IF CONTRACTOR'S SURVEYED LOCATION OF AN EXCAVATION CORNER IS NOT CONSISTENT WITH THE LOCATION SHOWN ON THE CONTRACT DRAWINGS, THE EXCAVATION AREA SHALL BE ADJUSTED IN THE FIELD TO MATCH ACTUAL SITE CONDITIONS AS APPROVED BY COR. THIS IS SPECIFIC TO EXCAVATION CORNERS ADJACENT TO ONE OR MORE HARD FEATURES SUCH AS DRIVEWAYS AND HOUSES. EXCAVATION CORNERS THAT DO NOT CONTACT A HARD FEATURE AS SHOWN ON THESE DRAWINGS ARE TO BE LOCATED PER COORDINATES SHOWN ON THIS SHEET.

SCALE: 1" = 10'

ARCADIS MALCOLM PIRNIE

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME
OU-1 REMEDIAL DESIGN
CORWELL-DUBLER ELECTRONICS SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE
PROPERTY 226
PRIMARY EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE-4A
DRAWN BY: C. SAWYER
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
FILE NAME: 15-06739C015
DATE: NOVEMBER 2012

Atlantic Engineering Laboratories, Inc.
41 Murray Street
Rahway, NJ 07065
www.aelinc.net
Office: 732-815-0400
Fax: 732-815-0422

Project Sign-In Sheet

Client: /

Project: OU1 REMEDIAL DESIGN CORNELL

Date: 08/06/13 Time In: 8:00AM

Time Out: 12:00PM

Total Hours Worked: 4 **Overtime:**

Description of Work Performed:

- ☐ Concrete Inspection Field, Yds. / Cyls made:
- ☐ Concrete Inspection Plant, Yds. Inspected:
- ☐ Masonry Inspection, Samples Made:
- ☐ Grout Inspection, Samples Made Today:
- ☐ Reinforcing Steel Inspection
- ☐ Footing Bottom Inspection
- ☑ Soil Compaction Testing
- ☐ No. of Soil Samples Picked Up:
- ☐ Soil Boring / Test Pits
- ☐ Asphalt Compaction Testing
- ☐ Structural Steel Inspection:
- ☐ Visual Welding ☐ PT ☐ MT ☐ UT
- ☐ Plumbness ☐ Torque Testing of Bolts
- ☐ Fireproofing Inspection. No. of Density Samples:
- ☐ Adhesion & Cohesion Test. No. of Tests done:
- ☐ Paint Thickness Testing
- ☐ Anchor Bolt Pull Test, No. of Tests Done:
- ☐ Floor Flatness Testing
- ☐ Swiss Hammer / Windsor Probe / Coring:
- ☐ Miscellaneous Testing:
- ☐ Report Provided: ☐ No ☑ Yes, if yes, ☑ Written or ☐ Verbal
- ☐ Did Client Schedule follow-up Inspection through the Office? ☐ No ☑ Yes

Sign: Inspector: Hashad Patel **Sign: Client:**

ngineering Laboratories, Inc.

AASHTO Accredited

SOIL COMPACTION TEST REPORT

Date: 08/06/13

Project #:

OU-1 REMEDIAL DESIGN CORNELL

Address 333 HAMILTON BLVD SOUTH PLAINFIELD NJ

Per the request of the client, a representative of Atlantic Engineering Laboratories, Inc. rrived at the above noted site to perform soils compaction testing. In-place density and moisture tests were taken using nuclear methods in accordance with ASTM D6938. The following is a summary of our observations:

ation: BUILDING PAD AREA

f Work Performed: PREVISOLY COMPACTED FINISH SUBGRADE WAS ITH A NUCLEAR DENSITY GAUGE. FINISH SUBGRADE WAS FOUND TO BE D STABLE.

15.3%

% Compaction Required 85%

Maximum Dry Density 106.6

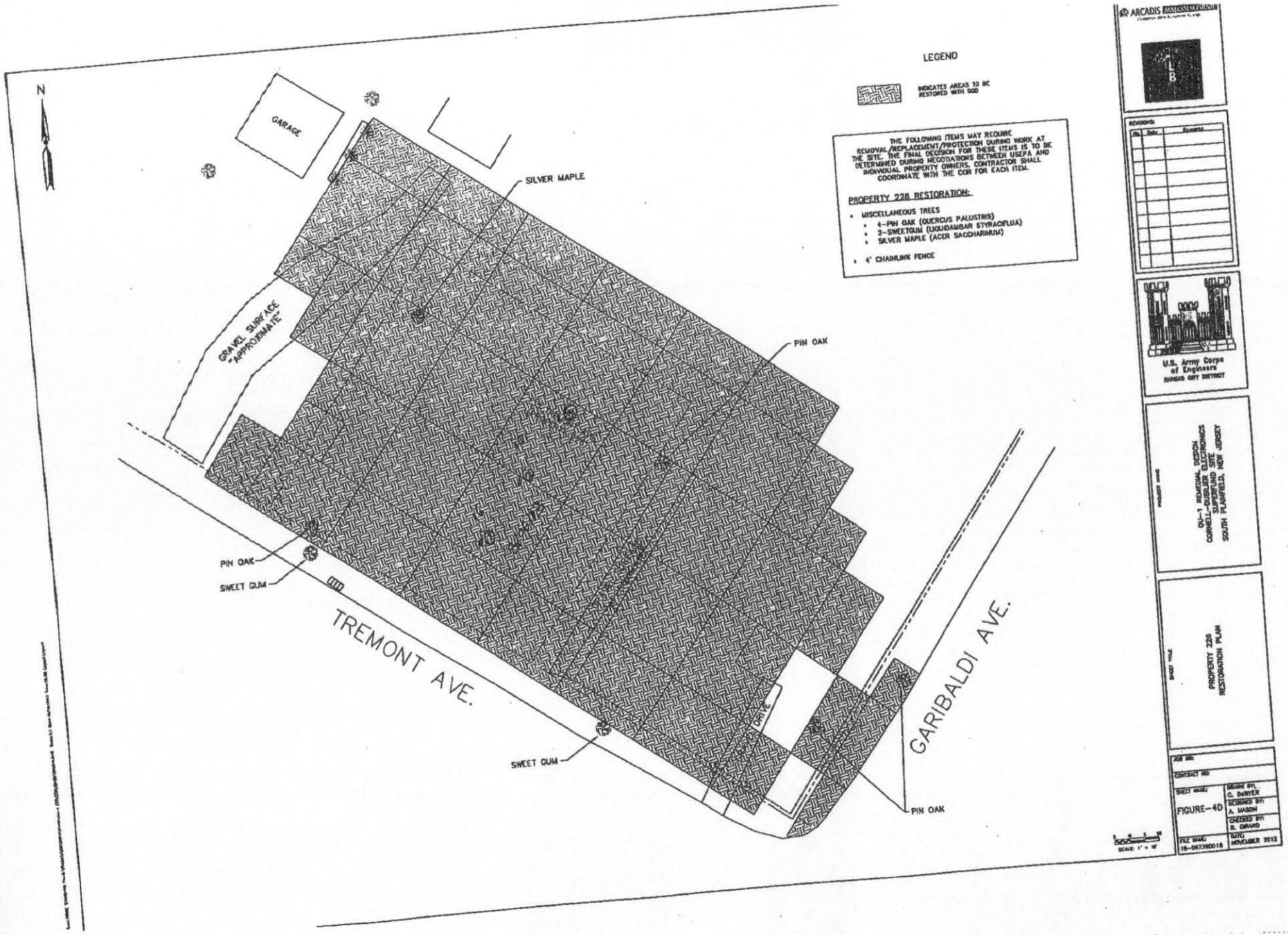
Laboratory Proctor Method ☐ D698 ☐ D1557

Soil isture	Field Dry Density (PCF)	Percent Compaction	Pass / Fail	Test Elevation	Location
.3	91.0	85.4	PASS	F.S	ZONE NO 16
.4	94.4	88.5	PASS	F.S	ZONE NO 10
.2	90.9	85.3	PASS	F.S	ZONE NO 10 & 16

n Attached: Yes ☐ No ☐

ician: HARSHAD C PATEL

41 Murray Street * Rahway, NJ 07065 * Tel: (732) 815-0400 * Fax: (732) 815-0422


N
GARAGE
SILVER MAPLE
GRAVEL SURFACE "APPROXIMATE"
PIN OAK
PIN OAK
SWEET GUM
TREMONT AVE.
SWEET GUM
DRIVE
GARIBALDI AVE.
PIN OAK
LEGEND
INDICATES AREAS TO BE RESTORED WITH SOD
THE FOLLOWING ITEMS MAY REQUIRE REMOVAL/REPLACEMENT/PROTECTION DURING WORK AT THE SITE. THE FINAL DECISION FOR THESE ITEMS IS TO BE DETERMINED DURING NEGOTIATIONS BETWEEN USEPA AND INDIVIDUAL PROPERTY OWNERS. CONTRACTOR SHALL COORDINATE WITH THE COR FOR EACH ITEM.
PROPERTY 226 RESTORATION:
• MISCELLANEOUS TREES
• 4-PIN OAK (QUERCUS PALUSTRIS)
• 2-SWEETGUM (LIQUIDAMBAR STYRACIFLUA)
• SILVER MAPLE (ACER SACCHARINUM)
• 4' CHAINLINK FENCE
ARCADIS
REVISIONS:
No. Date Remarks
U.S. Army Corps of Engineers
KANSAS CITY DISTRICT
PROJECT NAME
OU-1 REMEDIAL DESIGN
CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY
SHEET TITLE
PROPERTY 226
RESTORATION PLAN
JOB NO.
CONTRACT NO.
SHEET NAME:
FIGURE-4D
DRAWN BY: C. DeWYER
DESIGNED BY: A. MASON
CHECKED BY: B. GIRARD
FILE NAME: 16-067390018
DATE: NOVEMBER 2012
SCALE: 1" = 10'

NOVA

www.usanova.com

27833

DAILY FIELD REPORT

Project Name: CORNELL DUBILIER	NOVA Project No: 10215/012080
Client's Name: Sevenson Environmental	Day / Date: 08/19/13.
Report of: Soil	NOVA Rep: Nalin Shah

GENERAL INSTRUCTIONS: 1. Summary of contractor's operations. Location and approximate quantities placed (refer to plans, make sketch). Work completed. Delays or threatening delays. Contractor's force and equipment, as applicable. 2. Summary of inspector's participation and observations. Test performed-summary of results and acceptability. Summary of discussions with contractor or resident engineer. 3. Specification variations. Suggested by whom-action taken. 4. Acknowledgment of instructions received from any source (including NOVA) 5. Serious accidents. 6. Other important occurrence. 7. Name, title and position of supervisory personnel and subcontractors with whom you deal. Location of field office-contact phone (initial report only-indicate).

Location	TREMONT AVE GRID # 21, 22, 15, 16, 9, 10, 3, 27, 8 (attached Drawing)
	Checked and Verified the Compaction of as above GRID. Back fill with Imported Sandy material and Compacted with Large Vibratory Smooth Drum Rollers to Required density attained see Attached Report for Reference.

STATEMENTS IN THIS FIELD REPORT ARE SUBJECT TO NOVA'S PRINCIPAL REVIEW

NOVA Rep: [signature] ~~7-10-30~~ 6.30 - 10-00 AM

NOVA
www.usanova.com

FIELD DENSITY TEST WORKSHEET

Date: 08/19/13
Page 2 of 2

Project Name: CORNELL DUBILIER 10218 10 12080
Project No: TREMONT AVE
Project Location: SOUTH PLAINFIELD, NJ
Client: Sevenson
Contractor: Sevenson.

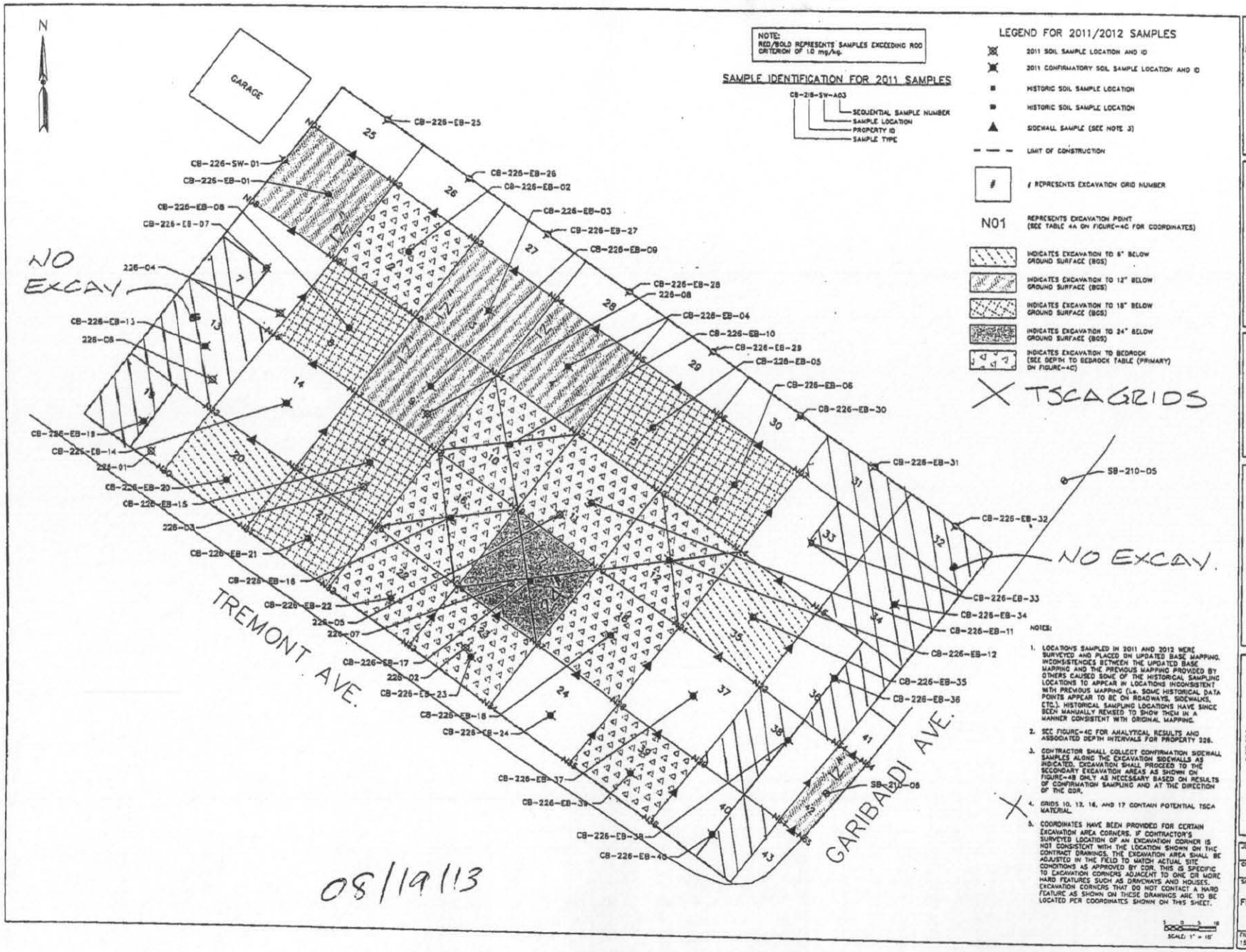
TEST INFORMATION			LABORATORY TEST				FIELD TEST					COMPACTION RESULTS		
Number	LOCATION (Specific Description)	Elevation	PROCTOR I.D.	SOIL DESCRIPTION	MAX DRY DENSITY (PCF)	% OPTIMUM MOISTURE	TEST DEPTH (INCHES)	DRY DENSITY (PCF)	% MOISTURE CONTENT	% COMPACTION	SPECIFIED % COMPACTION	PASS	FAIL	SPECIFIED % MOISTURE
1	TREMONT AVE GRID #22	12"		Imported Sand	106.6	15.3	12"	105.3	14.0	98.8	85%	✓		3x±
2	" GRID 21	12"		" "	"	"	"	104.4	13.5	98.0	"	✓		"
3	" " #16'	6"		" "	"	"	"	103.4	13.2	97.0	"	✓		"
4	" " #15'	6"		" "	"	"	"	99.0	13.0	92.9	"	✓		"
5	" " #8	6"		" "	"	"	"	104.5	13.6	98.1	"	✓		"
6	" " #9	6"		" "	"	"	"	103.1	15.8	96.8	"	✓		"
7	" " #10	6"		" "	"	"	"	101.2	16.0	95.0	"	✓		"
8	" " #3	6"		" "	"	"	"	99.6	16.5	93.5	"	✓		"
9	" " #27	6"		" "	"	"	"	104.0	13.1	97.5	"	✓		

Type of Earth Moving Equip. & No. of Units: TRUCK (Dump)
Type of Compaction Equip. & No. of Units: 15 TON V. Smooth Drum Roller
Fill Lift Thickness (Typical): 8" APPROX.
Method of Adding Moisture: N/A
Number of Passes by Compactor (Typical):
NOVA Observations ☐ Full-Time ☑ Part-Time
Proctor Type: ☐ Standard (ASTM D698-00a) ☑ Modified (ASTM D1557-00)
ASTM Test Method:
☐ Sand Cone (D1556-00)
☑ Nuclear Density/Moisture (D2922-96e1/D3017-96e1)
☐ Drive Ring (D2937-00)
☐ Moisture Content (D2216-98)

Nuclear Density Gauge Info:
Make TROXLER
Model 3430
Serial No. 34210
Daily Standard Count:
Density 106.6
Moisture 15.3

Comments: After compaction soil was firm and stable

NOVA Rep: [signature]



NOTES:

1. LOCATIONS SAMPLED IN 2011 AND 2012 WERE SURVEYED AND PLACED ON UPDATED BASE MAPPING. INCONSISTENCIES BETWEEN THE UPDATED BASE MAPPING AND THE PREVIOUS MAPPING PROVIDED BY OTHERS CAUSED SOME OF THE HISTORICAL SAMPLING LOCATIONS TO APPEAR IN LOCATIONS INCONSISTENT WITH PREVIOUS MAPPING (i.e. SOME HISTORICAL DATA POINTS APPEAR TO BE ON ROADWAYS, SIDEWALKS, ETC.). HISTORICAL SAMPLING LOCATIONS HAVE SINCE BEEN MANUALLY REVISED TO SHOW THEM IN A MANNER CONSISTENT WITH ORIGINAL MAPPING.
2. SEE FIGURE-4C FOR ANALYTICAL RESULTS AND ASSOCIATED DEPTH INTERVALS FOR PROPERTY 226.
3. CONTRACTOR SHALL COLLECT CONFIRMATION SIDEWALL SAMPLES ALONG THE EXCAVATION SIDEWALLS AS INDICATED. EXCAVATION SHALL PROCEED TO THE SECONDARY EXCAVATION AREAS AS SHOWN ON FIGURE-4B ONLY AS NECESSARY BASED ON RESULTS OF CONFIRMATION SAMPLING AND AT THE DIRECTION OF THE COR.
4. GRIDS 10, 12, 16, AND 17 CONTAIN POTENTIAL TSCA MATERIAL.
5. COORDINATES HAVE BEEN PROVIDED FOR CERTAIN EXCAVATION AREA CORNERS. IF CONTRACTOR'S SURVEYED LOCATION OF AN EXCAVATION CORNER IS NOT CONSISTENT WITH THE LOCATION SHOWN ON THE CONTRACT DRAWINGS, THE EXCAVATION AREA SHALL BE ADJUSTED IN THE FIELD TO MATCH ACTUAL SITE CONDITIONS AS APPROVED BY COR. THIS IS SPECIFIC TO EXCAVATION CORNERS ADJACENT TO ONE OR MORE HARD FEATURES SUCH AS DRIVEWAYS AND HOUSES. EXCAVATION CORNERS THAT DO NOT CONTACT A HARD FEATURE AS SHOWN ON THESE DRAWINGS ARE TO BE LOCATED PER COORDINATES SHOWN ON THIS SHEET.

SCALE: 1" = 10'

ARCADIS MALCOLM PIRNIE

REVISIONS:

No.	Date	Remarks

U.S. Army Corps of Engineers
KANSAS CITY DISTRICT

PROJECT NAME: OU-1 REMEDIAL DESIGN CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE SOUTH PLAINFIELD, NEW JERSEY

SHEET TITLE: PROPERTY 226 PRIMARY EXCAVATION PLAN

JOB NO:
CONTRACT NO:
SHEET NAME: FIGURE-4A
DRAWN BY: C. DeWYER
DESIGNED BY: A. MASON
CHECKED BY: S. GIRARD
FILE NAME: 15-067390015
DATE: NOVEMBER 2012

NOVA
QUALITY ASSURANCE
CONSULTING SERVICES

4 Mark Road
Suite A
Kenilworth NJ 07033
Office: (908) 688-6682
Fax: (908) 688-6687

SEVENSON ENVIRONMENTAL
333 Hamilton Blvd
South Plainfield, NJ 07080

Subject: Top Soil Testing Results

Dear Sir:

A Sample of on-site soils were delivered to the NOVA laboratory labeled as EME – New Egypt Top Soil Gamma 6981 for pH testing and Organic Content. Organic Content test was performed in accordance with ASTM Standard D2974, and the pH test was performed in accordance with ASTM Standard D4972. It was determined that the supplied materials contained 1.9% organic materials. The pH for the soil was 6.0. The natural moisture content of the material at time of arrival was 12.1%.

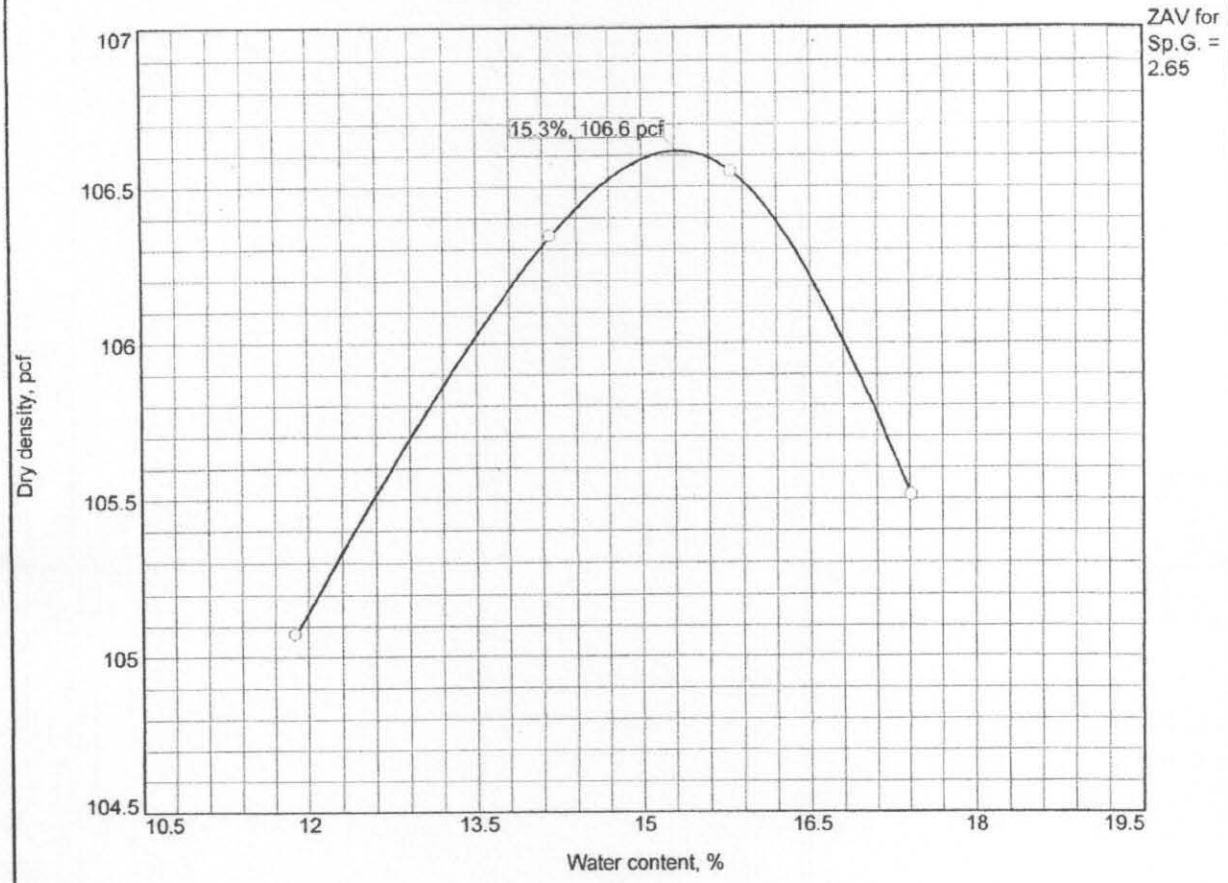
NOTE: This report does not reflect any environmental concerns with regards to usage of on-site materials.

We appreciate the opportunity to be of service to you on this project. Should you require any additional information please do not hesitate to contact our office.

Sincerely,
NOVA Quality Assurance Consulting Services, LLC

Dave Foster
Business Unit Manager

COMPACTION TEST REPORT



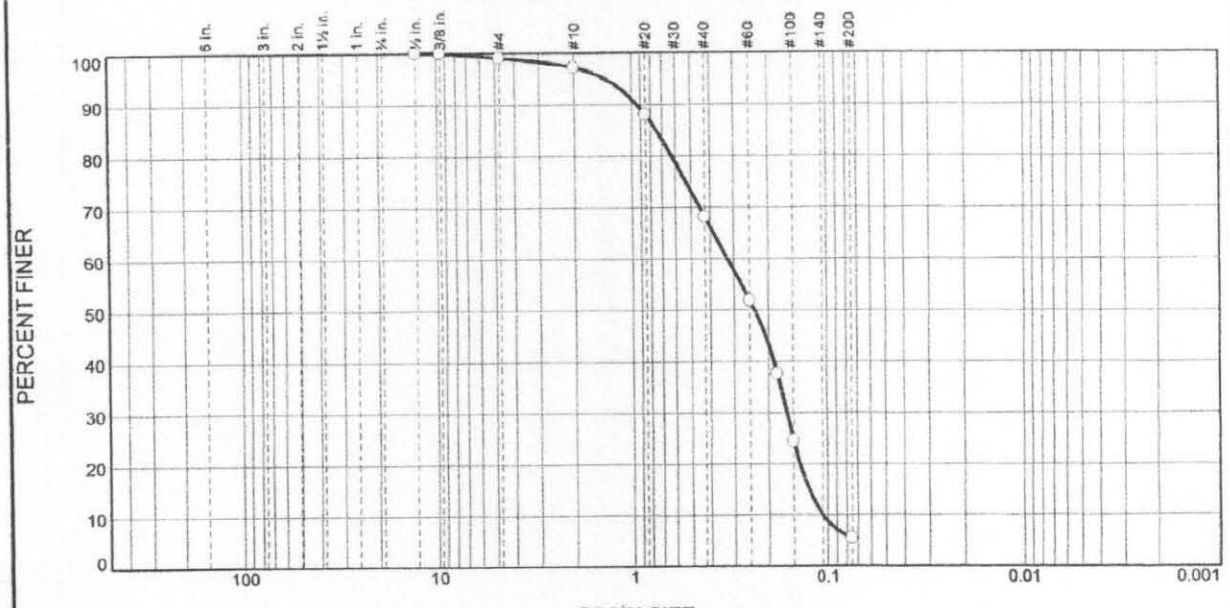
Test specification: ASTM D 1557-07 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
	SP-SM	A-3	12.1	2.65	NP	NP	0.9	5.5

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 106.6 pcf Optimum moisture = 15.3 %	Tan Brown Poorly Graded Sand with Silt
Project No. **Client:** Sevenson Environmental **Project:** Sevenson Environmental **Source of Sample:** Common Fill Gamma -7531 **Sample Number:** Bulk - 1	**Remarks:**
NOVA Quality Assurance Consulting Services, LLC **Kenilworth, New Jersey**	**Figure**

Tested By: DF **Checked By:** DF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	1.9	29.1	62.6	5.5	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
.5	100.0		
.375	100.0		
#4	99.1		
#10	97.2		
#20	88.0		
#40	68.1		
#60	51.9		
#80	37.5		
#100	24.4		
#200	5.5		

* (no specification provided)

Material Description

Tan Brown Poorly Graded Sand with Silt

Atterberg Limits (ASTM D 4318)

PL= NP LL= NP PI= NP

Classification

USCS (D 2487)= SP-SM AASHTO (M 145)= A-3

Coefficients

D_{90}= 0.9388 D_{85}= 0.7485 D_{60}= 0.3255
D_{50}= 0.2361 D_{30}= 0.1621 D_{15}= 0.1255
D_{10}= 0.1069 C_u= 3.04 C_c= 0.76

Remarks

Date Received: **Date Tested:** 3/4/13

Tested By: DF

Checked By: DF

Title: Laboratory Tech

Source of Sample: Common Fill Gamma -7531 **Date Sampled:**

Sample Number: Bulk - 1

NOVA Quality Assurance Consulting Services, LLC
Kenilworth, New Jersey

Client: Sevenson Environmental

Project: Sevenson Environmental

Project No: **Figure**

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - Sod

MATERIAL SOURCE - Selody Sod farm Inc.

DATE	LOAD NO.	TICKET #	SOURCE	SQ. FT.	SQ. FT. TO DATE	DAILY SQ. FT. DELIVERED	COST CODE
9/20/2012	1	1700	Selody	1200.00	**1200.00**	**1200**	27813
11/20/2012	2	1498	Selody	10100.00	**11300.00**	**10100.00**	27813
12/14/2012	3	1641	Selody	4500.00	**15800.00**	**4500.00**	27813
5/15/2013	4	1350	Selody	2400.00			27813
5/15/2013	5	15233	Selody	300.00	**18500.00**	**2700.00**	27813

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - Dense Graded Aggregate
MATERIAL SOURCE - Fanwood Crushed Stone Co. on behalf of Maddox Materials (FCS)

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
10/11/2012	1	190732	FCS	27.90	27.90		27816
10/11/2012	2	190769	FCS	26.18	54.08	54.08	27816
11/26/2012	3	197857	FCS	26.23	80.31		27816
11/26/2012	4	197892	FCS	26.88	107.19	53.11	27816
11/27/2012	5	187989	FCS	26.85	134.04	26.85	27816
5/3/2013	6	1764	FCS	26.97	161.01	26.97	27816
5/16/2013	7	04187	FCS	27.42	188.43	27.42	27816
6/5/2013	8	07695	FCS	26.17	214.60	26.17	27816
7/31/2013	7	18343	FCS	22.67	183.68		27816
7/31/2013	8	18397	FCS	25.20	208.88	47.87	27816

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - Common Fill
MATERIAL SOURCE - E.M.E., Inc.

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
9/6/2012	1	160703	EME	28.80	**28.80**		27810
9/6/2012	2	160704	EME	26.97	**55.77**		27810
9/6/2012	3	160714	EME	26.27	**82.04**		27810
9/6/2012	4	160715	EME	27.30	**109.34**	109.34	27810
9/25/2012	1	161964	EME	26.97	**136.31**		27810
9/25/2012	2	161966	EME	28.09	**164.40**		27810
9/25/2012	3	161967	EME	27.20	**191.60**		27810
9/25/2012	4	161968	EME	27.07	**218.67**		27810
9/25/2012	5	161969	EME	27.73	**246.40**		27810
9/25/2012	6	161974	EME	26.70	**273.10**		27810
9/25/2012	7	161975	EME	25.29	**298.39**		27810
9/25/2012	8	161976	EME	26.22	**324.61**		27810
9/25/2012	9	161977	EME	25.81	**350.42**		27810
9/25/2012	10	161978	EME	26.05	**376.47**	267.13	27810
9/26/2012	1	161982	EME	27.13	**403.60**		27810
9/26/2012	2	161983	EME	26.89	**430.49**		27810
9/26/2012	3	161984	EME	28.25	**458.74**		27810
9/26/2012	4	161987	EME	26.45	**485.19**		27810
9/26/2012	5	161988	EME	26.81	**512.00**		27810
9/26/2012	6	161989	EME	26.78	**538.78**		27810
9/26/2012	7	161994	EME	25.88	**564.66**		27810
9/26/2012	8	161995	EME	26.04	**590.70**		27810
9/26/2012	9	161996	EME	26.67	**617.37**	240.90	27810
10/8/2012	1	162126	EME	27.54	**644.91**		27810
10/8/2012	2	162127	EME	26.05	**670.96**		27810
10/8/2012	3	162128	EME	26.33	**697.29**		27810
10/8/2012	4	162129	EME	26.99	**724.28**		27810
10/8/2012	5	162130	EME	25.22	**749.50**		27810
10/8/2012	6	162131	EME	26.19	**775.69**		27810
10/8/2012	7	162138	EME	24.99	**800.68**		27810
10/8/2012	8	162139	EME	27.39	**828.07**		27810
10/8/2012	9	162140	EME	26.64	**854.71**		27810
10/8/2012	10	162141	EME	27.85	**882.56**		27810
10/8/2012	11	162143	EME	25.89	**908.45**		27810
10/8/2012	12	162144	EME	25.99	**934.44**		27810
10/8/2012	13	162153	EME	26.84	**961.28**		27810
10/8/2012	14	162154	EME	26.05	**987.33**		27810
10/8/2012	15	162155	EME	25.49	**1012.82**		27810
10/8/2012	16	162156	EME	26.58	**1039.40**		27810
10/8/2012	17	162157	EME	26.28	**1065.68**		27810
10/8/2012	18	162160	EME	26.97	**1092.65**	475.28	27810
10/10/2012	19	162195	EME	26.20	**1118.85**		27810
10/10/2012	20	162196	EME	26.71	**1145.56**		27810
10/10/2012	21	162197	EME	27.25	**1172.81**		27810
10/10/2012	22	162204	EME	26.69	**1199.50**		27810
10/10/2012	23	162213	EME	25.80	**1225.30**		27810
10/10/2012	24	162214	EME	25.47	**1250.77**		27810

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - Common Fill
MATERIAL SOURCE - E.M.E., Inc.

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
10/10/2012	25	162222	EME	26.22	**1276.99**		27810
10/10/2012	26	162223	EME	26.06	**1303.05**		27810
10/10/2012	27	162224	EME	26.42	**1329.47**	236.82	27810
11/5/2012	28	162465	EME	26.96	**1356.43**		27810
11/5/2012	29	162466	EME	25.36	**1381.79**		27810
11/5/2012	30	162467	EME	27.27	**1409.06**		27810
11/5/2012	31	162468	EME	26.15	**1435.21**		27810
11/5/2012	32	162469	EME	28.29	**1463.50**		27810
11/5/2012	33	162470	EME	26.16	**1489.66**		27810
11/5/2012	34	162471	EME	28.67	**1518.33**		27810
11/5/2012	35	162473	EME	25.17	**1543.50**		27810
11/5/2012	36	162474	EME	27.86	**1571.36**		27810
11/5/2012	37	162475	EME	26.82	**1598.18**		27810
11/5/2012	38	162477	EME	27.98	**1626.16**		27810
11/5/2012	39	162478	EME	26.39	**1652.55**		27810
11/5/2012	40	162479	EME	26.45	**1679.00**	349.53	27810
11/20/2012	41	162745	EME	27.45	**1706.45**		27810
11/20/2012	42	162764	EME	28.30	**1734.75**		27810
11/20/2012	43	162780	EME	27.75	**1762.50**	83.5	27810
4/4/2013	44	173108	EME	25.26	**1787.76**		27810
4/4/2013	45	173127	EME	26.86	**1814.62**		27810
4/4/2013	46	173149	EME	27.06	**1841.68**		27810
4/4/2013	47	173148	EME	25.98	**1867.66**		27810
4/4/2013	48	173228	EME	26.92	**1894.58**		27810
4/4/2013	49	173229	EME	25.49	**1920.07**	157.57	27810
6/4/2013	50	179713	EME	26.66	**1946.73**		27810
6/4/2013	51	179716	EME	26.91	**1973.64**	53.57	27810
7/30/2013	50	182930	EME	27.89	**1947.90**		27810
7/30/2013	51	182931	EME	28.04	**1975.94**		27810
7/30/2013	52	182932	EME	27.34	**2003.28**		27810
7/30/2013	53	182894	EME	26.85	**2030.13**		27810
7/30/2013	54	182895	EME	25.91	**2056.04**		27810
7/30/2013	55	182938	EME	25.16	**2081.20**		27810
7/30/2013	56	182896	EME	26.81	**2108.01**		27810
7/30/2013	57	182939	EME	24.00	**2132.01**		27810
7/30/2013	58	182940	EME	25.74	**2157.75**	237.68	27810
7/31/2013	59	183080	EME	24.02	**2181.77**		27810
7/31/2013	60	183081	EME	25.52	**2207.29**		27810
7/31/2013	61	183082	EME	24.91	**2232.20**		27810
7/31/2013	62	183002	EME	26.41	**2258.61**		27810
7/31/2013	63	183003	EME	25.94	**2284.55**		27810
7/31/2013	64	183004	EME	26.60	**2311.15**		27810
7/31/2013	65	183011	EME	26.88	**2338.03**		27810
7/31/2013	66	183012	EME	27.37	**2365.40**		27810
7/31/2013	67	183013	EME	26.60	**2392.00**		fds
7/31/2013	68	183044	EME	25.41	**2417.41**		27810
7/31/2013	69	183045	EME	26.89	**2444.30**		27810

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - Common Fill
MATERIAL SOURCE - E.M.E., Inc.

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
7/31/2013	70	183046	EME	26.70	**2471.00**	313.25	27810
8/1/2013	71	183101	EME	26.64	**2497.64**		27810
8/1/2013	72	183102	EME	26.80	**2524.44**		27810
8/1/2013	73	183103	EME	26.06	**2550.50**		27810
8/1/2013	74	183163	EME	26.98	**2577.48**		27810
8/1/2013	75	183167	EME	27.78	**2605.26**		27810
8/1/2013	76	183168	EME	28.91	**2634.17**		27810
8/1/2013	77	183191	EME	27.21	**2661.38**		27810
8/1/2013	78	183192	EME	27.43	**2688.81**		27810
8/1/2013	79	183193	EME	28.50	**2717.31**	246.31	27810
8/5/2013	80	183492	EME	25.71	**2743.02**		27810
8/5/2013	81	183491	EME	25.69	**2768.71**		27810
8/5/2013	82	183490	EME	26.54	**2795.25**		27810
8/5/2013	83	183421	EME	26.56	**2821.81**		27810
8/5/2013	84	183420	EME	26.15	**2847.96**		27810
8/5/2013	85	183419	EME	27.03	**2874.99**		27810
8/5/2013	86	183411	EME	27.02	**2902.01**		27810
8/5/2013	87	183413	EME	27.45	**2929.46**		27810
8/5/2013	88	183412	EME	26.00	**2955.46**		27810
8/5/2013	89	183529	EME	27.86	**2983.32**		27810
8/5/2013	90	183528	EME	28.27	**3011.59**		27810
8/5/2013	91	183527	EME	27.53	**3039.12**	321.81	27810
8/6/2013	92	183633	EME	25.01	**3064.13**		27810
8/6/2013	93	183634	EME	25.61	**3089.74**		27810
8/6/2013	94	183598	EME	25.72	**3115.46**		27810
8/6/2013	95	183597	EME	24.99	**3140.45**		27810
8/6/2013	96	183596	EME	26.09	**3166.54**		27810
8/6/2013	97	183565	EME	27.72	**3194.26**		27810
8/6/2013	98	183563	EME	25.49	**3219.75**		27810
8/6/2013	99	183564	EME	26.15	**3245.90**	206.78	27810
8/8/2013	100	183658	EME	25.35	**3271.25**	25.35	27810
8/9/2013	101	183714	EME	26.64	**3297.89**		27810
8/9/2013	102	183713	EME	27.61	**3325.50**		27810
8/9/2013	103	183715	EME	25.76	**3351.26**		27810
8/9/2013	104	183694	EME	26.39	**3377.65**		27810
8/9/2013	105	183695	EME	27.11	**3404.76**		27810
8/9/2013	106	183696	EME	26.63	**3431.39**		27810
8/9/2013	107	183678	EME	26.28	**3457.67**		27810
8/9/2013	108	183677	EME	26.93	**3484.60**		27810
8/9/2013	109	183679	EME	26.97	**3511.57**	240.32	27810

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - TOPSOIL
MATERIAL SOURCE - E.M.E., Inc.

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
9/6/2012	1	160722	EME	25.04	**25.04**		27812
9/6/2012	2	160723	EME	25.45	**50.49**	**50.49**	27812
10/16/2012	3	162301	EME	27.36	**77.85**		27812
10/16/2012	4	162304	EME	27.23	**105.08**		27812
10/16/2012	5	162307	EME	27.37	**132.45**	81.96	27812
10/17/2012	6	162311	EME	27.1	**159.55**		27812
10/17/2012	7	162312	EME	26.7	**186.25**		27812
10/17/2012	8	162313	EME	26.58	**212.83**		27812
10/17/2012	9	162314	EME	27.87	**240.70**		27812
10/17/2012	10	162323	EME	26.59	**267.29**		27812
10/17/2012	11	162324	EME	25.73	**293.02**	160.57	27812
11/12/2012	12	162512	EME	27.62	**320.64**		27812
11/12/2012	13	162513	EME	27.46	**348.10**		27812
11/12/2012	14	162530	EME	27.01	**375.11**		27812
11/12/2012	15	162531	EME	28.43	**403.54**		27812
11/12/2012	16	162539	EME	28.03	**431.57**		27812
11/12/2012	17	162540	EME	25.44	**457.01**		27812
11/12/2012	18	162541	EME	25.87	**482.88**		27812
11/12/2012	19	162542	EME	24.92	**507.80**	214.78	27812
12/10/2012	20	163434	EME	27.73	**535.53**		27812
12/10/2012	21	163445	EME	26.54	**562.07**	54.27	27812
3/29/2013	22	172424	EME	26.25	**588.32**		27812
3/29/2013	23	172423	EME	26.79	**615.11**		27812
3/29/2013	24	172526	EME	26.21	**641.32**		27812
3/29/2013	25	172527	EME	26.75	**668.07**		27812
3/29/2013	26	172530	EME	25.69	**693.76**	131.69	27812
4/16/2013	27	174688	EME	25.59	**716.35**		27812
4/16/2013	28	174904	EME	26.01	**745.36**		27812
4/16/2013	29	174912	EME	26.11	**771.47**		27812
4/16/2013	30	174937	EME	26.14	**797.61**	103.85	27812
5/10/2013	31	178171	EME	25.3	**822.91**		27812
5/10/2013	32	178175	EME	25.28	**848.19**	50.58	27812
6/5/2013	33	179719	EME	25.53	**873.72**	25.53	27812
6/17/2013	34	179895	EME	25.81	**899.53**		27812
6/17/2013	35	179896	EME	26.54	**926.07**	52.35	27812

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - 4000 PSI Concrete
MATERIAL SOURCE - The Phillips Companies

DATE	LOAD NO.	TICKET #	SOURCE	YARD	YARDS TO DATE	DAILY YARDS DELIVERED	COST CODE
9/12/2012	1	378899	Phillips	5	**5.00**	5.00	27816
6/20/2013	2	377605	Phillips	5	**10.00**	5.00	27816

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - Trench Sand
MATERIAL SOURCE - E.M.E , Inc - New Eqypt, NJ

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - I-2 Asphalt
MATERIAL SOURCE - Stavola Asphalt -Bound Brook (BB), STA-SEAL INC (STA), Stilo Excavation Inc. (SE)

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
11/20/2012	1	'00388051	BB	19.28	**19.28**	19.28	27811
12/14/2012	2	750315	STA	20.12			27811
12/14/2012	3	750324	STA	20.16			27811
12/14/2012	4	750338	STA	8.86	**68.42**	49.14	27811
5/17/2013	5	08049	SE	21.15	**89.57**	21.15	27811
6/25/2013	6	14637	SE	10.00	**99.57**	10	27811

Cornell Dubilier Electronics Superfund Site
Contract No: W912DQ-10-D-3006 TO: 0002

MATERIAL DELIVERY LOG

MATERIAL DESCRIPTION - I-5 Asphalt
MATERIAL SOURCE - Stavola Asphalt - Bound Brook (BB), STA-SEAL INC (STA), Stilo Excavation Inc. (SE)

DATE	LOAD NO.	TICKET #	SOURCE	TONS	TONS TO DATE	DAILY TONS DELIVERED	COST CODE
9/17/2012	1	00377066	BB	1.01	1.01	1.01	27811
11/20/2012	2	00388141	BB	6.96	7.97	6.96	27811
12/14/2012	3	750355	STA	19.92			27811
12/14/2012	4	750371	STA	9.86	37.75	29.78	27811
12/19/2012	5	00393933	BB	1.00	38.75	1	27811
5/17/2013	6	08093	SE	10.37	49.12	10.37	27811
6/25/2013	7	14669	SE	7.00	56.12	7	27811