TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
D-4	990228		17.5 - 20				0.05 B		307	2.3	1.98	0.32					
D-5	990179		0 - 0.5				5.41										
D-5	990180		0.6 - 1.8				0.8										
D-5	990181		1.8 - 2.5				0.06 B										
D-5	990182		2.5 - 5				0.03 B										
D-5	990185		10 - 12.5				0.06 B										
D-5	990187		15 - 17.5				0.07 B		2.67 J	0.27	0.02 U	0.37					
D-6	990172		0 - 0.5				0.33										
D-6	990173		0 - 1.5	0.1 U	0.27	0.07	0.33		116	17.9	0.02 U	18.8	3.8	38	10	28	EA-F
D-6	990174		1.5 - 2.5				0.03 B										
D-6	990177		7.5 - 9.4				0.01 B										
D-7	990163		0 - 0.5				0.45										
D-7	990164		0 - 1.3	0.05 B	0.5	0.14	0.69		82	42.4	8.09	34.3	3.6	36	22	14	EA-F
D-7	990165		1.3 - 4.7				0.02 B										
D-7	990168		10 - 12.5				0.17										
D-7	990170		15 - 17.5				0.04 B										
E-1	990995		0 - 0.5				0.27 J										
E-1	990996		0.5 - 2.5	0.01 J	0.37 J	1.3 J	1.61 J		2130	0.28	0.02 B	0.26	0.3 J	3 J	50 J	-47 J	EA-N
E-1	991000		10.3 - 12.5	0.01 J	0.01 J	0.01 J	0.01 J		128	1.13	1	0.13	9.2	92 J	1 J	92 J	EA-N
E-2	990991		0 - 0.5				0.16 J										
E-2	990992		1.5 - 5	0.01 J	0.08 J	0.02 J	0.11 J		112	4.24	3.11	1.13	28 J	280 J	3 J	277 J	EA-F
E-2	990993		5.3 - 7.5				0.01 J										
E-3	990797		0 - 0.5				0.03 B										
E-3	990798		0.5 - 1.5				0.04 B										
E-3	990799		1.5 - 2.5				0.01 U										
E-3	990802		7.5 - 10	0.01 B	0.02 B	0.01 U	0.01 B		161	1.43	1.24	0.19	12.4	124	1 U	124	BA-N
E-3	990803		10 - 12.5				0.01 B										
E-4	990611		0 - 0.5				1.56										
E-4	990614		5 - 7.5	0.01 J	0.05 J	0.08 J	0.13 J		2.93 J		0.38	1.3	3.2 J	32 J	4 J	28 J	EA-F
E-4	990615		7.5 - 10				0.01 U										
E-4	990616	DUP 990615	7.5 - 10				0.1										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
E-4	990617		10 - 12.5				0.1										
E-5	990603		0 - 0.5				0.38										
E-5	990606		5 - 6.5	0.01 U	0.53	0.12	0.61		255		2.41	6.64	1	10	19	-9	EA-F
E-5	990607		6.5 - 7.5				0.14										
E-5	990608		7.5 - 10	0.01 U	0.01 U	0.05 B	0.06 B		1.75		0.04 B	0.42	0.6	6	2 B	4	EA-N
E-6	990361		0 - 0.5				0.44 J										
E-6	990362		0.5 - 2.5	0.03 B	0.41	0.2	0.64		382	14.6 J	0.02 J	14.9 J	4.3	43	20	23	EA-F
E-6	990363		2.5 - 5				3.83 J										
E-6	990364		5 - 7.5				0.51 J										
E-6	990365		7.5 - 10				0.11										
E-6	990368		15 - 17.5				0.05 B										
F-1	990896		0 - 2.5				0.18 J										
F-1	990897		2.5 - 5				0.02 J										
F-1	990900		10 - 12.5	0.01 U	0.02 B	0.02 B	0.02 B		231 J	1.48	1.23	0.25	10.8	108	1 B	107	EA-N
F-1	990901		12.5 - 15				0.02 J										
F-2	990904		0 - 0.5				0.01 J										
F-2	990905		2.2 - 3.2	0.01 B	0.03 B	0.55	0.59		2.2 J	1.49	1.27	0.22	16.7	167	18	149	EA-F
F-2	990906		5.5 - 7.5				0.11 J										
F-2	990908		10.5 - 12.5				0.02 J										
F-3	990911		0 - 0.5				0.54 J										
F-3	990912		0.5 - 5	1.16 J	1.36 J	0.01 J	2.33 J		2.9 J	3.28	1.61	1.67	16.7 J	167 J	73 J	94 J	EA-F
F-3	990913		7-May				0.31 J										
G-1	990120		0 - 0.5				0.06 J										
G-1	990121		0 - 2.5				0.02 B		0.21 J	2	1.69	0.31					
G-1	990124		7.5 - 9.9				0.01 J										
G-1	990129		20 - 22.5				0.01 J										
G-2	990189		0 - 0.5				0.49										
G-2	990190		0 - 2.5				0.05 B		167	1.35	0.14	1.21					
G-2	990193		7.5 - 9.75				0.01 U										
G-2	990196		15 - 17.2				0.01 B										
G-2	990197		17.5 - 20				0.01 B										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
G-3	990805		0 - 0.5				1.01										
G-3	990806		2.5 - 4.6				0.04 B										
G-3	990807		5 - 7.5				0.01 B										
G-3	990810		12.5 - 14.8				0.03 B										
G-3	990812		17.5 - 20.7	0.01 U	0.01 U	0.02 B	0.02 B		183	2.35	2.08	0.27	18.8	188	1 B	187	WA-N
G-4	990620		0 - 0.5				1.4										
G-4	990621		0.5 - 2.5	0.02 J	0.05 J	0.14 J	0.21 J		2.82		0.91	1.6	9.5 J	95 J	7 J	88 J	WA-F
G-4	990622		2.5 - 5.7				0.4										
G-4	990623		5.7 - 7.5				0.04 B										
G-4	990626		12.5 - 15				0.02 B										
G-4	990627		15 - 17.5	0.02 J	0.01 J	0.01 J	0.02 J		125		1.86	0.22	16.1 J	161 J	1 J	160 J	WA-N
G-5	990915		0 - 0.5				0.83 J										
G-5	990916		0.5 - 2.5				0.09 J										
G-5	990918		5 - 9.5				0.77 J										
G-5	990919	DUP 990918	5 - 9.5				0.8 J										
G-5	990920		9.5 - 12.5	0.01 J	0.02 J	0.02 J	0.02 J		200	0.28	0.02 U	0.29	0.4 J	4 J	1 J	3 J	EA-N
G-5	990921		12.5 - 15				0.03 J										
G-7	990924		0 - 0.5				0.06 J										
G-7	990926		3.5 - 10	0.55 J	0.07 B	1.92 J	2.54 J		2.52 J	16.2	2.24	13.9	1.6 J	16 J	79 J	-63 J	EA-F
G-7	990927		10 - 12.5				0.35 J										
G-7	990928		12.5 - 15				0.15 J										
H-2	990109		0 - 0.5				0.33 J										
H-2	990111		2.5 - 4.2				0.03 J										
H-2	990112		5.2 - 6.6				0.02 B										
H-2	990115		12.5 - 14.2				0.01 J										
H-2	990118		20 - 25				0.01 J		80	1.66	1.43	0.23					
H-4	990132		0 - 0.5				0.05 B										
H-4	990134		6-Mar				0.02 B		0.51 J	1.85	0.75	1.1					
H-4	990135		6 - 7.5				0.01 U										
H-4	990139		15 - 17.5				0.02 B										
H-5	990141		0 - 0.5				0.48										

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Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
H-5	990143		2.5 - 4.2				0.02 B										
H-5	990144		4.2 - 7				0.01 U		0.43 J	0.29	0.02 U	0.34					
H-5	990145	DUP 990144	4.2 - 7				0.01 U		0.47 J	0.3	0.02 U	0.33					
H-5	990147		10 - 11.9				0.32										
H-6	990149		0 - 0.5				0.71										
H-6	990151		2.5 - 4.8				0.75										
H-6	990153		5 - 6.75				0.1		2.28 J	0.35	0.02 U	0.4					
H-7	990156		0 - 0.5				0.29										
H-7	990157		0 - 2.5				0.64										
H-7	990158		2.5 - 5				0.02 B										
H-7	990161		7.5 - 10	0.1 U	0.08	0.34	0.38		458	1.01	0.46	0.55	5.7	557	12	45	EA-N
H-8	990421		0 - 0.5				1.29 J										
H-8	990422		0.5 - 1.5	0.1 U	0.44	0.38	0.77		377	11.3 J	4.63 J	6.64 J	10.5	105	24	81	LPRA-L
H-8	990423		1.5 - 2.5				0.09 J										
H-8	990425		5 - 7.5				0.14 J										
I-1	990001		5.5 - 7.5				0										
I-1	990002		5 - 5.5				0										
I-1	990003		0 - 0.5				0		150 J	9.75 J	2.97 J	6.78 J					
I-1	990004		22.5 - 24.5				0.03 B										
I-1	990005		12.5 - 15				0.02 B										
I-11	991092		0 - 0.5				0.96 J										
I-11	991093		0.5 - 4.5	0.05 J	0.67 J	0.26 J	0.99 J		116	9.66	0.75	8.91	3 J	30 J	31 J	-1 J	SPA-F
I-11	991094		4.5 - 5				0.01 J										
I-2	990047		0 - 0.5				2.6 J										
I-2	990049		2.8 - 4.2				0.01 J		36 J	22.1	21.6	0.54					
I-2	990051		0 - 2.8				0.03 J										
I-2	990052		10 - 12.5				0.01 J										
I-2	990056		17.5 - 20				0.01 J										
I-2	990061		30 - 31.25				0.01 J										
I-3	990032		0 - 0.5				0.3 J										
I-3	990033		0 - 2.5				0.05 J										

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Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
I-3	990034		2.5 - 5				0.01 J										
I-3	990036		17.5 - 19.9				0.01 J		71 J	2.06	1.88	0.18					
I-3	990037	DUP 990036	17.5 - 19.9				0.01 J										
I-3	990042		10 - 12.2				0.01 J										
I-3	990044		25 - 26.7				1.01 J										
I-4	990007		0 - 0.5				0.39										
I-4	990008		5.25 - 6.5				0.01 U										
I-4	990009		5-Mar				0.28										
I-4	990010		15-Dec				0.02 B										
I-4	990011		22.5 - 23.8				0.03 B		59 J	1.5	1.2	0.3					
I-5	990064		0 - 0.5				0.32 J										
I-5	990065		0 - 2.4				0.09 J										
I-5	990066		2.7 - 4.5				0.02 J										
I-5	990069		10 - 12.2				0.02 J										
I-5	990072		17.5 - 20				0.02 J										
I-6	990025		0 - 0.5				0.81										
I-6	990026		0.5 - 2				0.01 B		118 J	2.41	2.03	0.38					
I-6	990027		10 - 12.5				0.02 B										
I-6	990030		2.5 - 5				0.02 B										
I-6	990031		12.5 - 14.5				0.02 B										
I-7	990482		0 - 0.5				0.57 J										
I-7	990485		5 - 6.2				1.55 J										
I-7	990486		6.2 - 7.5				0.15 J										
I-7	990489		12.5 - 15				0.07 J										
I-9	990856		0 - 0.5				0.36 J										
I-9	990858		3.5 - 4.5				0.02 J										
I-9	990859		4.5 - 7.5	0.01 U	0.01 U	0.01 U	0.01 U		153	0.47	0.32	0.15	3.6	36	1 U	36	SPA-N
J-1	990075		0 - 0.5				0.06 J										
J-1	990077		2.5 - 3				0.03 J										
J-1	990078		4-Mar				0.01 J		32 J	0.37	0.02 U	0.47					
J-1	990081		10 - 12.5				0.01 J										

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Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
J-1	990082	DUP 990081	10 - 12.5				0.01 J										
J-1	990085		17.5 - 20				0.01 J										
J-1	990087		22.5 - 25				0.01 J										
J-10	991147		0 - 0.5				0.01 B										
J-10	991150		5.9 - 7.5				1.57										
J-10	991151		8.5 - 9.5				1.3										
J-10	991152		9.5 - 12.5	0.04 B	0.32	0.48	0.84		3.07 J	13.2	4.69	8.49	39.5	395	26	369	SPA-N
J-11	991120		0 - 0.5				0.07 B										
J-11	991122		3.5 - 5	0.01 U	0.96	0.45	1.34		3.54 J	27.9	0.32	27.6	1.4	14	42	-28	SPA-S
J-11	991123		10 - 10.5				0.65										
J-12	991140		0 - 0.5				0.18										
J-12	991143		5.5 - 7.5				5.08										
J-12	991144		10-Sep	0.02 B	0.12	0.08 B	0.22		411	16.8	8.46	8.31	59.8	598	7	591	SPA-N
J-13	991087		0 - 0.5	0.03 J	0.29 J	0.72 J	1.04 J		3.82 J	11.2	0.38	10.8	7 J	70 J	33 J	37 J	SPA-F
J-13	991089		5-Mar				0.87 J										
J-13a	991090		7-May				1.3 J										
J-2	990089		0 - 0.5				0.06 J										
J-2	990090		0 - 2.5				0.02 J		27 J	0.72	0.05 B	0.66					
J-2	990093		7.5 - 10				0.01 J										
J-3	990099		1 - 2.9				0.31 J										
J-3	990101		2.9 - 5				0.02 J										
J-3	990104		10 - 12.5				0.02 J										
J-3	990107		17.5 - 20				0.01 J		141 J	1.99	1.77	0.22					
J-6	990814		0 - 0.5				0.62										
J-6	990815		0.5 - 2.5				0.15										
J-6	990816		2.5 - 5				0.08 B										
J-6	990818		10-Aug	0.1	0.01 U	0.03 B	0.13		240	2.46	2.23	0.23	19.6	196	4 B	192	EA-F
J-7	991167		0 - 0.8	0.01 U	0.05 B	0.17	0.2		2.19	2.9	1.33	1.57	9.4	94	6	88	SPA-F
J-7	991168		0.8 - 2.5				0.03 B										
J-7	991171		10-Aug				0.03 B										
J-8	991161		0 - 0.5				0.82										

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Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
J-8	991162	DUP 991161	0 - 0.5				0.82										
J-8	991164		3.5 - 5	0.01 U	0.47	2.94	3.32		3.89	3.88	0.02 U	4.01	0.6	6	104	-98	SPA-S
J-8	991165		14 - 15				0.61										
J-9	991155		0 - 0.5				0.7										
J-9	991158		5.4 - 9	0.19	1.27	1.65	3.11		3040	29.3	6.59	22.7	0.5 B	5	97	-92	SPA-S
J-9	991159		9 - 12.5				3.33										
K-1	991110		0 - 0.5				0.05 B										
K-1	991113		2.8 - 5	0.01 U	0.01 U	0.01 U	0.01 U		0.441 J	2.76	2.5	0.26	19.3	193	1 U	193	UPSEA-F
K-1	991114		5.5 - 7.5				0.01 U										
K-1	991115		10-Aug				0.01 U										
K-2	991018		0 - 0.5				0.03 J										
K-2	991019		0.5 - 2.5				0.97 J										
K-2	991020		3.2 - 5	0.02 J	0.45 J	0.08 J	0.55 J		2.82 J	11	4.93	6.02	37.5 J	375 J	17 J	358 J	UPSEA-N
K-2	991024		12.5 - 15				0.66 J										
K-2	991025		15.1 - 17.5				0.31 J										
K-3	991013		0 - 0.5				0.33 J										
K-3	991015		3.2 - 5				0.58 J										
K-3	991016		5.5 - 7.5	0.01 J	0.51 J	0.36 J	0.78 J		653	15.2	5.06	10.1	41.6 J	416 J	24 J	392 J	UPSEA-N
K-4	990837		0 - 0.5				0.13 J										
K-4	990838		1 - 2.5				0.16 J										
K-4	990839		3.7 - 5				0.24 J										
K-4	990840		5 - 7.5	0.01 U	0.07 B	0.12	0.19		323	18.2	8.17	10.1	60.9	609	6	603	UPSEA-N
K-5	991041		0 - 0.5				0.04 J										
K-5	991042		0.5 - 2.5				0.17 J										
K-5	991043		3.2 - 5	0.05 J	0.08 J	0.07 J	0.2 J		2.17 J	5.27	1.89	3.38	17.5 J	175 J	6 J	169 J	UPSEA-N
L-2	990963		0 - 0.5				0.46 J										
L-2	990964		7.2 - 10	0.01 J	0.84 J	1.46 J	2.03 J		2.58 J	17.8	1.32	16.5	2	20 J	63 J	-43 J	UPSEA-F
L-2	990965		11.2 - 14.2				2.67 J										
L-2	990966		14.2 - 15				1.2 J										
L-3	990956		0 - 0.5				0.44 J										
L-3	990959		6 - 9.5	0.01 J	2.7 J	1.4 J	3.26 J		2.46 J	0.68 J	0.12 J	0.56 J	40 J	400 J	102 J	298 J	UPSEA-F

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
L-3	990961		13.5 - 14.5				3.09 J										
L-3	990962		17 - 18				1.45 J										
L-4	990820		0 - 0.3				0.64										
L-4	990823		6.2 - 7.5	0.01 B	0.57	2.34	2.92		2210	21.4	0.02 U	22.4	1.9	19	91	-72	UPSEA-F
L-4	990826		14.5 - 17.5				0.74 J										
L-4	990827	DUP 990826	14.5 - 17.5				0.8 J										
L-4	990828		18 - 20				0.25 J										
L-6	990788		0 - 0.5				0.27										
L-6	990792		7.5 - 10				1										
L-6	990793		10 - 12.5	0.01 B	0.04 B	0.16	0.21		536	0.17	0.03 B	0.14	2.9	29	7	22	UPSEA-F
L-6	990794		12.5 - 17.5				0.24										
L-6	990795		17.5 - 20				0.14										
LY-1	991183		8.2 - 10				1.29										
LY-2	991184		18 - 20				2.84										
M-1	990724		0 - 0.5				0.18										
M-1	990728		7.5 - 10	0.06 B	0.42	0.21	0.69		400	9.58	4.82	4.76	38.6	386	22	364	UPSEA-F
M-1	990729		10 - 11.2				0.51										
M-1	990730		11.2 - 12.5				0.53										
M-2A	990738		0.5 - 2.5				0.06 B										
M-2A	990740		5 - 7.5				0.5										
M-2B	990750		0.5 - 2.5				0.09 B										
M-2B	990753		7.5 - 12	0.03 B	0.3	0.08 B	0.41		232	7.9	1.37	6.53	22.8	228	13	215	UPSEA-F
M-3	990755		0 - 2.5				0.09 B										
M-3	990758		7.5 - 10				1.84										
M-3	990759		10 - 13.5				1.49										
M-4	990771		0 - 0.5				0.13										
M-4	990775		7.5 - 10				0.09 B										
M-4	990776		10 - 11.5	0.01 U	0.11	0.05 B	0.14		237	3.18	0.78	2.4	8.2	82	4 B	78	UPSEA-F
M-4	990777		11.5 - 12.5				0.35										
N-1	990201		0 - 0.5				0.02 B										
N-1	990203		1.5 - 4.6				1.89										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
N-1	990207		12-Oct				2.21										
N-1	990210		17.5 - 19				1.72										
N-1	990213		25 - 26.5				2.24										
N-1	990217		35.2 - 37.5	0.24	0.08 B	0.21	0.53		469	11.2	4.34	6.86	13.3	133	17	116	SPA-A
N-2	990260		0 - 0.5				0.02 B										
N-2	990261	DUP 990260	0 - 0.5				0.03 B										
N-2	990264		5 - 6.6				1.92										
N-2	990267		12.5 - 15				1.74										
N-2	990270		20 - 21.9				3.22										
N-2	990273		27.5 - 29.7				3.06										
N-2	990280		35 - 36.8				2.66 J										
N-2	990283		42.5 - 44.5				2.06 J										
N-2	990287		52.5 - 53.7				4.48 J										
N-2	990288		53.7 - 55				3.51 J										
N-2	990290	Split 990291	57.5 - 58.8	0.1 U	1.5	0.92	2.37		9.44 J	13 J	0.68 J	12.3 J	1.3	13	74	-61	SPA-S
N-2	990292		58.8 - 59.1				2.53 J										
N-3	990230		0 - 0.5				0.03 B										
N-3	990233		5 - 6.8				2.12										
N-3	990236		12.5 - 14.8				2.9										
N-3	990239		20 - 22.2				3.06										
N-3	990242		27.5 - 29.3				2.99										
N-3	990245		35 - 36.8	0.1 U	1.52	1.02	2.52		5.09 J	34.5 J	5.62 J	28.9 J	0.7	7	79	72	SPA-S
N-3	990246		37.8 - 38.5				4.09										
P-1	990552		0 - 0.5	0.01 U	0.32	0.24	0.55		0.384	5.51	2.1	3.41	5.5	55	17	38	EA-F
P-1	990555		5 - 7.5				0.01 J										
P-1	990556		7.5 - 10				0.01 J										
P-2	990598		0 - 0.5				0.02 B										
P-2	990599		0.5 - 2.5	0.02 B	0.01 U	0.01 U	0.01 U		81		2.23	0.33	20.5	206	1 U	206	EA-N
P-2	990601		5 - 7.5				0.01 B										
P-3	990591		0 - 0.5				0.88										
P-3	990592		0.5 - 2				0.25										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
P-3	990593		5-Feb	0.01 U	0.01 U	0.01 U	0.02 B		0.887	2.98	2.83	0.15	25.7	257	1 B	256	EA-N
P-3	990594		5 - 7.5				0.03 B										
P-4	990585		0 - 0.5				0.46										
P-4	990587		2.5 - 5	0.01 U	2.29	0.53	2.77		9.7	7.34	0.66	6.68	5.8	58	87	-29	EA-F
P-4	990589		5.7 - 7.5				0.14										
PZ-1S	990935		0 - 0.5				0.13 J										
PZ-1S	990937		2.7 - 5.5				0.6 J										
PZ-1S	990938		5.5 - 7.5	0.01 J	0.02 J	0.01 J	0.01 J		0.573 J	0.72	0.6	0.12	5 J	50 J	1 J	50 J	SPA-N
PZ-2S	991129		0 - 0.5				0.55										
PZ-2S	991130		0.5 - 3.5	0.01 U	0.46	0.16	0.57		126	11	0.23	10.7	2.2	22	18	4	SPA-F
PZ-2S	991131		3.5 - 5				0.01 U										
PZ-2S	991132		8-May				0.13										
PZ-3I	991207		0 - 0.5				0.36										
PZ-3I	991208		0.5 - 3.5				0.59										
PZ-3I	991209	DUP 991208	0.5 - 3.5				0.62										
PZ-3I	991211		5 - 8.9	0.25	0.29	0.1	0.64		397	26	6.08	19.9	37.5	375	20	355	SPA-N
PZ-3I	991215		15 - 18.7				0.01 U										
PZ-4I	991198		10-Jul				0.18										
PZ-4I	991201		15 - 17.5	0.01 U	0.03 B	0.28	0.31		901	4.68	4.44	0.24	33.7	337	10	327	SPA-N
PZ-4P	991195		0 - 0.5				0.54										
PZ-4P	991196		2.5 - 5	0.01 U	0.09 B	0.04 B	0.1		300	1.83	0.08 B	1.75	0.5	5	3 B	2	SPA-F
PZ-4P	991197		5 - 7.5				0.51										
W-10S	990433		0 - 0.5				0.04 J										
W-10S	990434	DUP 990433	0 - 0.5				0.03 J										
W-10S	990437		5 - 6.6				1.94 J										
W-10S	990440		12.5 - 14.3				2.02 J										
W-10S	990443		20 - 21.8				1.83 J										
W-10S	990446		27.5 - 29.2				2.58 J										
W-10S	990448		32.5 - 39.8	0.16	1.02	1.26	2.61 J		6.27 J	18.7	1.9	16.8	0.5 U	5 U	76	-76	SPA-S
W-10S	990449		40 - 43.7	0.02 B	0.46	2.13	2.97 J		3.8 J	5.26	0.02 U	5.26	1.7	17	82	-65	SPA-S
W-10S	990450		43.7 - 46				0.65 J										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
W-11I	991176		58 - 60				0.79										
W-11I	991177		60 - 62.4				0.19										
W-11I	991179		65 - 70.6	0.12	0.01 U	0.01 U	0.1		119	3.19	2.46	0.73	20.8	208	3 B	205	SPA-N
W-11S	990391		0 - 0.5				0.04 J										
W-11S	990394		5 - 7.2				1.54 J										
W-11S	990397		12.5 - 14.3				2.82 J										
W-11S	990400		20 - 22.2				2.03 J										
W-11S	990404		30 - 31.9				1.56 J										
W-11S	990406		35 - 37.2				2.09 J										
W-11S	990409		42.5 - 49.8	0.1 U	0.5	1.6	2.03		8.78 J	23.2 J	0.02 J	23.5 J	0.5 U	5 U	63	-63	SPA-S
W-11S	990410		50 - 57.3	0.25	1.07	1.31	3.63		2340	26.2 J	2.27 J	23.9 J	0.4 B	4 B	113	-109	SPA-S
W-11S	990411		57.3 - 58				4.22 J										
W-12D	990647		22.5 - 25				0.02 B										
W-12D	990651		45 - 46.5				0.01 U										
W-12D	990673		75 - 77.1	0.01 U	0.02 B	0.01 U	0.01 U		65	0.23	0.17	0.06 B	2.4	24	1 U	24	BA-N
W-12S	990628		0 - 0.5				0.01 B										
W-12S	990631		7.5 - 17.5	0.01 J	0.01 J	0.01 J	0.01 J		86		1.13	0.12	10.1 J	101 J	1 J	101 J	BA-N
W-13D	991069		25 - 27	0.01 J	0.17 J	1.27 J	1.41 J		3200	1.18	0.97	0.21	8 J	80 J	44 J	36 J	EA-N
W-13D	991073		35 - 37.5				0.18 J										
W-13D	991075		45 - 49.5				0.15 J										
W-13D	991077		53.5 - 65				0.04 J										
W-13S	990712		0 - 0.5				0.15										
W-13S	990715		5 - 17.5	0.13	0.15	1.1	1.38		8.2 J	0.86	0.29	0.57	1.6	16	43	-27	EA-F
W-14S	990761		0 - 0.5				0.22										
W-14S	990763		0.9 - 2.3				0.01 U										
W-14S	990766		7.5 - 9.8				0.01 U										
W-14S	990770		17.5 - 29	0.01 U	0.01 U	0.01 U	0.01 U		75	1.64	1.36	0.28	12.8	128	1 U	128	EA-N
W-15S	990780		0 - 0.5				0.3										
W-15S	990782		2.5 - 3.6				0.11										
W-15S	990783		3.6 - 5				0.07 B										
W-15S	990786		10 - 21.6	0.01 U	0.01 U	0.02 B	0.02 B		242	1.25	0.95	0.3	8.9	89	1 B	88	WA-N

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
W-15S	990787	DUP 990786	10 - 21.6	0.01 B	0.02 B	0.01 U	0.02 B		263	1.49	1.21	0.28	10.7	107	1 B	106	WA-N
W-16S	990732		0 - 0.5				0.93										
W-16S	990733		0 - 2.5				0.31										
W-16S	990734		2.8 - 4.8				0.01 U										
W-16S	990736		7.5 - 12.8	0.01 U	0.01 B	0.01 U	0.01 U		88	1.38	0.99	0.39	9.1	91	1 U	91	EA-N
W-17D	990684		0 - 0.5				0.96										
W-17D	990686		2.5 - 4.7				0.09 B										
W-17D	990698		5.2 - 12.5	0.01 U	0.01 U	0.01 B	0.01 B		67	1.71	1.43	0.28	11.8	118	1 U	118	EA-N
W-17D	990699	DUP 990698	5.2 - 12.5	0.01 U	0.02 B	0.01 U	0.01 B		43	1.68	1.43	0.25	11.8	118	1 U	118	EA-N
W-17D	990703		20 - 21.1				0.01 U										
W-17D	990707		35 - 40				0.01 U										
W-17D	990710		55 - 56.6	0.1	0.02 B	0.02 B	0.14		167	0.4	0.22	0.18	1.4	14	4 B	10	EA-N
W-18D	991098		15 - 17				0.77 J										
W-18D	991101		22 - 25	0.01 J	0.01 J	0.01 J	0.01 J		94	3.58	3.38	0.2	29.2 J	292 J	1 J	292 J	UPSEA-N
W-18D	991103		30 - 35				0.01 J										
W-18D	991104		35 - 51				0.01 J										
W-18D	991105	DUP 991104	35 - 51				0.01 J										
W-18S	990870		0 - 0.5				0.44 J										
W-18S	990873		5 - 8.6	0.02 B	0.38	2.08	2.48		2130	7.15	0.65	6.5	9	90	78	12	UPSEA-F
W-18S	990874		8.6 - 12.5	0.18	0.3	0.24	0.72		308	27	7.28	19.7	43.7	437	23	414	UPSEA-N
W-19D	991004		22.5 - 25				0.06 J										
W-19D	991008		30 - 32				0.32 J										
W-19D	991010		35 - 46.2	0.06 J	0.03 J	0.01 J	0.1 J		147	2.64	2.5	0.14	13.5 J	135 J	3 J	132 J	UPSEA-N
W-19S	990880		0 - 0.5				0.25 J										
W-19S	990883		5 - 7.2				0.69 J										
W-19S	990884		7.5 - 13	0.06 B	0.22	0.43	0.71		2.36 J	3.07 J	0.38 J	2.69 J	4.2	42	22	20	UPSEA-F
W-19S	990885		15.3 - 17.5				0.13 J										
W-1S	990687		0 - 0.5				0.04 B										
W-1S	990691		7.5 - 10				0.02 B										
W-1S	990692		10 - 12.5				0.01 U										
W-1S	990695		17.5 - 20				0.01 U										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
W-1S	990697		25 - 30	0.01 B	0.01 U	0.01 U	0.01 U		38	0.4	0.23	0.17	3.4	35	1 U	35	BA-N
W-20I	991028		0 - 0.5				0.02 J										
W-20I	991032		7.5 - 10				7.49 J										
W-20I	991036		12.5 - 14.2				1.18 J										
W-20I	991038		17.5 - 19				0.46 J										
W-20I	991182		22.5 - 25	0.03 B	0.01 B	0.01 B	0.05 B		277	1.39	1.16	0.23	9.7	97	2 B	95	LPRA-N
W-21D	990845		0 - 0.5				0.88 J										
W-21D	990846		0.5 - 3				0.75 J										
W-21D	990847		3 - 4.2				0.02 J										
W-21D	990850		10 - 12.5				0.03 J										
W-21D	990853		17.5 - 19.5				0.02 J										
W-21D	991081		25 - 30				0.02 J										
W-21D	991083		35 - 45	0.03 J	0.01 J	0.01 J	0.02 J		51	5.94	5.78	0.16	49.3 J	493 J	1 J	492 J	EA-N
W-21D	991084		45 - 60				0.01 J										
W-22S	990678		0 - 0.5				1.26										
W-22S	990680		2.5 - 5				1.67										
W-22S	990681		5.5 - 7.5				0.01 U										
W-22S	990682		7.5 - 12.5	0.01 U	0.03 B	0.02 B	0.05 B		220	3.99	3.38	0.61	29.5	295	2 B	293	EA (VPCDA)-N
W-22S	990683		12.5 - 15	0.01 U	0.01 U	0.01 B	0.01 B		100	0.75	0.64	0.11	7.1	71	1 U	71	EA (VPCDA)-N
W-2D	991045		15 - 17	0.01 J	0.01 J	0.01 J	0.02 J		458	2.69	2.5	0.19	21.5 J	215 J	1 J	214 J	BA-N
W-2D	991048		22 - 22.5	0.01 J	0.01 J	0.02 J	0.02 J		3.33 J	1.86	1.77	0.09 B	14.3 J	143 J	1 J	142 J	BA-N
W-2D	991049	DUP 991048	22 - 22.5	0.01 J	0.01 J	0.02 J	0.02 J		3.61 J	2.25	2.15	0.09 J	14.6 J	146 J	1 J	145 J	BA-N
W-2D	991065		72 - 75				0.01 J										
W-2D	991066		75 - 85				0.01 J										
W-2S	990718		0 - 0.5				0.03 B										
W-2S	990721		5 - 12.5	0.01 U	0.01 U	0.01 B	0.01 B		228	2.18	1.95	0.23	18.2	182	1 U	182	BA-N
W-3S	990981		12.5 - 25	0.01 J	0.01 J	0.01 J	0.01 J		266	3.15	2.95	0.2	26.6 J	266 J	1 J	266 J	BA-N
W-4S	990953		15 - 26.2	0.01 J	0.01 J	0.01 J	0.01 J		0.751 J	3.08	2.89	0.19	26.6 J	266 J	1 J	266 J	BA-N
W-5S	990741		0 - 0.5				0.53										
W-5S	990744		5 - 5.6				0.01 U										
W-5S	990745		5.6 - 7.1				0.01 B										

TABLE C1-8

Soil Analytical Data - Geochemical Parameters (Validated)

Sample location	SampleID	QC Type	Depth (ft bgs)	Sulfur Pyritic %	Sulfur Residual %	Sulfur Sulfate %	Sulfur, Total %	pH, Saturated Paste Units	Specific Conductance umhos/cm	Total Carbon %	Total Inorganic Carbon %	Total Organic Carbon %	Neutralization Potential CaCO3 %	Acid Neutralization Potential (calc), t CaCO3/Kt	Acid Generation Potential (calc) t CaCO3/Kt	Acid-Base Potential (calc) t CaCO3/Kt	Location-Sample Material
W-5S	990746	DUP 990745	5.6 - 7.1				0.02 B										
W-5S	990749		12.5 - 18	0.01 B	0.01 U	0.01 U	0.01 U		60	2.29	2.05	0.24	17.1	171	1 U	171	WA-N
W-6S	990940		0 - 0.5				3.37 J										
W-6S	990942		3 - 4.1				0.13 J										
W-6S	990943		4.1 - 10	0.01 J	0.01 J	0.38 J	0.38 J		2.45 J	0.41 J	0.07 J	0.34 J	0.1 B	1 J	12 J	-11 J	EA-N
W-6S	990944	DUP 990943	4.1 - 10	0.02 J	0.01 J	0.43 J	0.45 J		2.6 J	0.2	0.02 U	0.19	0.3 J	3 J	14 J	-11 J	EA-N
W-7S	990930		0 - 0.5				0.18 J										
W-7S	990933		2.6 - 6.6	0.01 J	0.01 J	0.01 J	0.01 J		0.784	0.54	0.4	0.14	4.2 J	42 J	1 J	42 J	SPA-N
W-8S	990558		0 - 0.5				0.02 B										
W-8S	990561		5 - 7.1				3.32										
W-8S	990564		12.5 - 15				2.4 J										
W-8S	990567		20 - 21.5				1.4 J										
W-8S	990570		27.5 - 30				2.72 J										
W-8S	990573		35 - 36.9				1.75 J										
W-8S	990577		42.5 - 44				3.6 J										
W-8S	990580		50 - 53.7	0.01 J	4.42 J	3.26 J	5.97 J		1.75	3.75	0.02 U	3.78	24.1 J	241 J	187 J	54 J	SPA-S
W-8S	990581	DUP 990580	50 - 53.7	0.01 U	2.94	2.96	5.48		1.97	3.99	0.05 B	3.94	24.2	242	171	71	SPA-S
W-8S	990583	Split 990582	55 - 61.1				0.68										
W-8S	990584		61.1 - 62.4				1.08										
W-9S	990325		0 - 0.5				0.02 J										
W-9S	990326	DUP 990325	0 - 0.5				0.02 J										
W-9S	990330		5 - 7.2				1.24 J										
W-9S	990333		12.5 - 15				1.61 J										
W-9S	990336		20 - 22				0.78 J										
W-9S	990339		27.5 - 29.3				1.38 J										
W-9S	990342		35 - 37.3				1.91 J										
W-9S	990345		42.5 - 44.7				1.83 J		8.27 J	26 J	1.19 J	24.9 J					
W-9S	990346		45 - 46.6	0.1 U	0.97	1.06	1.94		9.79 J	24.8 J	1.59 J	23.2 J	0.9	9	61	-52	SPA-S
W-9S	990347		50 - 53.7	0.05 B	0.25	1.09	1.39		7.4 J	29 J	8.08 J	20.9 J	1.5	15	43	-28	SPA-S
W-9S	990348	DUP 990347	50 - 53.7	0.1 U	0.33	0.98	1.28		7.7 J	23.3 J	3.62 J	19.6 J	1.7	17	40	-23	SPA-S
W-9S	990349		53.7 - 54.2				0.55 J										

Location Key:
- LPRA: Lithopone Ridges Area
- WA: Western Area
- EA: Eastern Area
- BA: Bluff Area
- UPSEA: Upland Portion of the Southeast Area
- SPA: Slag Pile Area
- VPCDA: Vanadium Pentoxide Catalyst Disposal Area

Sample Material Key:
- L: Lithopone
- A: Aquitard
- F: Fill
- S: Slag
- N: Native

ATTACHMENT 6

ATTACHMENT 6

Attachment 6

Revised Tables

TABLE 4-2C

Aquitard Thickness and Description
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Location	Easting	Northing	Aquitard	Fill	Description	Interval	Thickness	Elevation (asl)	Comments
Pre-Phase I RI and Phase I RI Boreholes									
A-1	11734.7256	11213.2455	Y	N	Organic clay, Silty clay	1.5 to 15+	>13.5	504.1 to 490.6(-)	
A-2	11878.6292	11110.5497	Y	N	Silty clay, clayey silt	0 to 20+	>20	495 to 475 (-)	
A-3	12006.1223	11032.7858	Y	Y	Silty Clay/Clayey Silt	10 to 20+	>10	484.3 to 474.2 (-)	
A-4	12214.4320	10883.2069	Y	Y	Clayey silt, Silty clay	5 to 17.5+	>12.5	483.5 to 471(-)	
A-5	12491.3562	10620.0591	Y	N	Silty Clay	0 to 12.5+	>12.5	483.9 to 471.4(-)	
B-1	11392.3455	11118.0596	Y	N	Silty clay, clayey silt	2.5 to 30+	>27.5	502.4 to 474.9(-)	
B-2	11675.5814	10977.2554	Y	N	Clayey silt, silty Clay, Peat (14 to15+ feet)	6.5 to 20+	>13.5	486 to 472.5 (-)	
B-3	11836.1208	10913.8138	Y	Y	Silty Clay	12.5 to 17.5+	>5	474.7 to 469.7(-)	
B-4	12001.1007	10785.3300	Y	Y	Silty clay, peat (14.5 to 15 feet)	14.5 to 17.5+	>3	472.3 to 469.3(-)	Native soils above peat (Aquitard).
B-5	12133.9242	10632.3656	Y	Y	Silty clay, peat (16.5 to 17.5 feet)	16.5 to 20+	>3.5	469.8 to 466.3(-)	
B-6	12559.7961	10393.3337	Y	Y	Clayey silt, Clayey sand	1.5 to 12.5+	>11	478.1 to 467.1(-)	
C-1	11153.4811	11021.4642	Y	Y	Silty clay, clayey silt	4 to 15+	>11	484.4 to 473.4(-)	
C-2	11487.1825	10987.0520	Y	N	Silty Clay	5 to 27.5+	>22.5	490.2 to 467.7(-)	
C-3	11635.2536	10836.6024	Y	Y	Silty clay, Peat (17.5 to 18 feet)	16 to 20+	>4	471.1 to 467.1(-)	
C-4	11795.9317	10714.0733	Y	Y	Silty clay	15 to 20	5	469.8 to 464.8	Fill from 5.4 to 15 feet described as silt and clayey silt.
C-5	11927.2798	10567.8322	Y	Y	Silty clay, Peat (14.5 to 16.5+ feet)	14.5 to 17.5+	>3	469.7 to 466.7(-)	
D-2	11027.5719	10832.0922	Y	Y	Silty Clay	7.5 to 15+	>7.5	476.1 to 468.6(-)	
D-3	11222.3620	10798.7929	Y	Y	Silty Clay/ Sandy clay, clayey silt	6.5 to 12.5+	>6	476.5 to 470.5(-)	
D-4	11462.7612	10843.0200	Y	Y	Silty Clay/ Peat (7.5 to 9 feet)	7.5 to 20+	>12.5	476.9 to 464.4(-)	
D-5	11708.1545	10631.7436	Y	Y	Clay, organic silt	1.8 to 16	14.2	478.4 to 464.2	
D-6	11894.1962	10509.6605	Y	Y	Clay	1.5 to 10+	>8.5	477.3 to 468.8(-)	
D-7	12098.7497	10382.6433	Y	Y	Clay	1.3 to 15	13.7	476.5 to 462.8	
E-1	10326.5348	10703.8148	Y	Y	Silty clay/ clayey silt	0.5 to 12.5+	>12	486.2 to 474.2 (-)	
E-2	10650.5823	10795.8305	Y	Y	Silty clay	6.2 to 7.5+	>1.3	477.9 to 476.6(-)	
E-3	10798.4913	10892.2181	Y	Y	Silty Clay	1.5 to 12.5+	>11	483.4 to 472.4(-)	
E-4	10952.2528	10558.9864	Y	Y	Silty Clay/Clayey Silt	7.5 to 12.5+	>5	475.5 to 470.5(-)	
E-5	11094.8872	10553.1543	Y	Y	Silty clay	6.5 to 10+	>3.5	476 to 472.5(-)	
E-6	11190.2817	10601.1409	Y	Y	Silty Clay/Clayey Silt	7.5 to 17.5+	>10	474.8 to 464.8(-)	
F-1	10302.8645	10521.9429	Y	Y	Silty clay/ clayey silt	2.5 to 15+	>12.5	483 to 471.3(-)	
F-2	10460.3801	10495.9247	Y	Y	Silty clay	3.2 to 12.5+	>9.3	480.8 to 471.6(-)	
F-3	10713.3179	10480.4236	Y	Y	Silty clay	5 to 7.5+	>2.5	478.5 to 476(-)	
G-1	9905.0502	10272.3779	Y	N	Clay	0 to 22.5	>22.5	486.5 to 464(-)	
G-2	10236.5083	10255.9030	Y	N	Clay/silt/fine sand	2.5 to 20+	>17.5	487.4 to 469.9(-)	
G-3	10713.4474	10198.8935	Y	Y	Silty Clay/Clayey Silt	5 to 17.5	12.5	477.3 to 464.8	
G-4	11017.2979	10350.1038	Y	Y	Silty clay/clayey silt, peat (5.7 to 7.5 feet)	5.7 to14	8.3	476.3 to 468	
G-5	11219.6010	10400.6300	Y	Y	Clayey silt	9.5 to 14.3	4.8	471.8 to 466.3	Fill is described as a silty clay.
G-7	11621.7930	10561.0240	Y	Y	Silty clay, peat (10 to12.5 feet)	10 to 15+	>5	468.7 to 463.7(-)	
H-2	9942.0941	10061.6000	Y	Y	Clay	7 to 22.5	15.5	482.5 to 467	
H-4	11090.4046	9992.7031	Y	Y	Clay, sandy clay	6 to 10.2	4.2	471.4 to 467.2	
H-5	11553.4802	10198.7897	Y	Y	Sandy silt	8 to 11.3	3.3	468.17 to 464.87	Sandy silt encountered at 468.2 correlates with the aquitard material encountered at nearby borings SB-46/MW-43U (466.13), and H-6 (469.1). Bottom of aquitard determined at top of gravel zone encountered from 464.87 to 464.47.
H-6	11807.5477	10229.9091	Y	Y	Clay	5.3 to 6.6	1.3	469.1 to 467.78	
H-7	12168.1083	10254.1929	Y	Y	Clay, Peat (5.8 to >10 feet)	2.5 to 10+	>7.5	472.3 to 464.8(-)	
H-8	12645.4329	10165.2541	Y	Y	Silty clay/sand & gravel	1.5 to 10+	>8.5	476.5 to 468(-)	
I-1	8996.8649	9612.9287	Y	Y	Silty clay, clayey silt, clay, sandy clay	5.5 to 21.4	15.9	475.8 to 459.9	
I-2	9459.8651	9637.4979	Y	Y	Clay	2.5 to 27.5	25	480.1 to 455.1	
I-3	9809.7414	9658.3793	Y	Y	Clay	11.2 to 24	12.8	471.6 to 458.5	
I-4	10170.4647	9629.9032	Y	Y	Silty clay, clay	5.3 to 20	14.7	473.6 to 458.9	
I-5	10448.6048	9600.1243	Y	Y	Silty clay, sandy clay	5 to 17	12	472.2 to 460.2	
I-6	10873.6550	9602.2424	Y	Y	Silty clay, clay and silt	2.2 to 10	7.8	473 to 465.2	
I-6a	10873.6550	9602.2424	Y	Y	Silty clay, clay and silt	2.5 to 10	7.5	472.7 to 465.2	
I-7	11437.5612	9579.6621	Y	Y	Silt	6.2 to 10	3.8	467.9 to 463.1	
I-9	12262.3138	10034.2255	NA	Y	NA	NA	NA	NA	Interpreted to be above Aquitard materials.
I-11	12828.0497	9810.1589	Y	Y	Peat (5 to 8 feet)	5 to 8+	3+	468.7 to 465.7(-)	Peat noted on outside of sampler.
J-1	9268.8520	9216.5209	Y	Y	Silty clay, clay	3 to 23	20	473.1 to 449.1	
J-2	9688.0134	9178.4817	Y	N	Clay	4 to 11	7	472.2 to 465.2	
J-3	10121.0965	9186.5882	Y	Y	Clay, silt	2.9 to 15	12.1	472.3 to 460.2	
J-6	11450.3371	9285.2049	Y	Y	Clayey silt, peat (4.5 to 5.5 feet)	2.5 to 10+	>7.5	465.8 to 458.3(-)	
J-7	11731.9980	9314.8835	No	Y	NA	NA	0	NA	Aquitard not encountered
J-8	11992.4943	9345.1071	Y	Y	Peat (7.5 to 15 feet)	7.5 to15+	>7.5	459.5 to 452(-)	
J-9	12161.5498	9367.7937	Y	Y	Silty clay, peat (9 to 12.5 feet)	9 to 12.5+	> 3.5	456.6 to 453(-)	
J-10	12517.6827	9403.1240	Y	Y	Peat (10 to 15 feet)	10 to 15+	>5	457.6 to 452.6(-)	
J-11	12702.4992	9426.1449	Y	Y	Peat (5 to 12.5 feet)	5 to 12.5+	>7.5	462 to 454.5(-)	
J-12	12874.4745	9517.4745	Y	Y	Peat (7.5 to 10 feet)	7.5 to 10+	>2.5	463.5 to 461(-)	
J-13	13159.3946	9510.6335	Y	Y	Peat (5 to 12.5 feet)	5 to 12.5+	>7.5	467.4 to 459.9(-)	
K-1	11915.5165	9203.6627	NA	Y	NA	NA	NA	NA	Interpreted to be above Aquitard materials.
K-2	12200.7476	9246.1878	Y	Y	Peat (2.5 to 15 feet)	2.5 to 15	12.5	460.4 to 447.9	
K-3	12376.3791	9263.0090	Y	Y	Peat (5 to 7.5 feet)	5 to 7.5+	>2.5	456.4 to 453.9(-)	
K-4	12798.8954	9324.6630	Y	Y	Peat (4.8 to 7.5 feet)	4.8 to 7.5+	>2.7	459.4 to 456.7(-)	
K-5	12901.4523	9339.9829	Y	Y	Clayey silt, peat (9 to 10 feet)	3 to 10+	>7	461.4 to 454.4(-)	
L-2	12173.3519	9005.7100	Y	Y	Peat (14.2 to 15 feet)	14.2 to 15+	>0.8	452.7 to 451.9(-)	

TABLE 4-2C

Aquitard Thickness and Description
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Location	Easting	Northing	Aquitard	Fill	Description	Interval	Thickness	Elevation (asl)	Comments
L-3	12383.1292	9020.5845	Y	Y	Peat (17 to18 feet)	17 to 18+	>1	449.3 to 448.3(-)	
L-4	12552.4053	9021.2311	Y	Y	Silt and clayey silt, peat (17.4 to 18:5 feet)	17.4 to 20+	>2.6	450 to 447.4(-)	
L-6	13343.6394	8966.5760	Y	Y	Peat (17.5 to 20 feet)	17.5 to 20+	>2.5	447.9 to 445.4(-)	
M-1	12167.1448	8762.3832	Y	Y	Peat (11.2 to 15 feet)	11.2 to 15+	>3.8	449.5 to 445.7(-)	
M-2A	12184.2341	8432.9496	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
M-2B	12184.2341	8432.9496	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
M-3	12352.7295	8432.0358	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
M-4	12359.4557	8708.7007	Y	Y	Peat (11.5 to 12.5 feet)	11.5 to 12.5+	>1	446.9 to 445.9(-)	
N-1	11961.3053	9841.0064	Y	Y	Peat (35.2 to 36.2 feet), organic clay	35.2 to 37.5+	>2.3	460.2 to 457.9(-)	
N-2	11938.2490	9494.9838	Y	Y	Peat (58.8 to 60 feet)	58.8 to 60+	>1.2	458.7 to 457.5(-)	
N-3	12499.5222	9764.2497	Y	Y	Peat (37.8 to 40 feet)	37.8 to 40+	>2.2	462.8 to 460.6(-)	
P-1	13140.9876	9895.0414	NA	Y	NA	NA	0	NA	Interpreted to be top of LA (no Aquitard). Transition area between site and Bluff.
P-2	13247.1358	9859.6455	NA	Y	NA	NA	0	NA	Interpreted to be top of LA (no Aquitard). Transition area between site and Bluff.
P-3	13211.0429	9791.2008	NA	Y	NA	NA	0	NA	Interpreted to be top of LA (no Aquitard). Transition area between site and Bluff.
P-4	13132.4688	9848.0350	NA	Y	NA	NA	0	NA	Interpreted to be top of LA (no Aquitard). Transition area between site and Bluff.
PZ-1(S)	11791.1417	9778.5212	Y	Y	Peat (7.5 to 10 feet)	7.5 to 10+	>2.5	465.4 to 462.9(-)	
PZ-1(I)	11791.1417	9778.5212	Y	Y	Organic silt/Peat (7.5-11.5)	7.5 to 11.5	4	465.4 to 461.3	
PZ-2I	12514.8405	9948.6828	Y	Y	Peat (7 to 11 feet)	7 to 11	4	466.5 to 462.2	
PZ-2S	12514.8405	9948.6828	Y	Y	Peat (7 to 8 feet)	7 to 8+	>1	466.5 to 465.5 (-)	
PZ-3I	13000.2291	9555.8480	Y	Y	Peat (5 to 10.8 feet), silt	5 to 12.8	7.8	466.3 to 458.5	
PZ-3S	13005.9210	9551.4130	Y	Y	Peat (2.5 to 7.5 feet)	2.5 to 7.5+	>5	468.8 to 463.7(-)	
PZ-4I	11554.7333	9338.5897	Y	Y	Peat (5 to 6.5 feet), sandy clay, silty clay	5 to 11	6	464.2 to 458.2	
PZ-4S	11554.7333	9338.5897	Y	Y	Peat (5 to 6.5 feet), sandy clay	5 to10+	>5	464.4 to 459.4(-)	
PZ-5S	12617.6554	10261.4451	Y	Y	Clayey silt, silty clay	0 to14	14	478 to 464	
PZ-6S	12700.3518	10127.4714	Y	Y	Silty clay	10 to 12.5+	>2.5	467.6 to 465.1(-)	
W-1S	9843.0679	10750.9404	NA	Y	NA	NA	NA	NA	Bluff undifferentiated. Clay lense from 10.2 to 10.5 feet. Transition area between site and Bluff.
W-2D	12089.5678	11158.2693	Y	N	Silty clay	17 to 39	22	489 to 455	Transition area between site and Bluff.
W-2S	12096.6790	11166.5440	NA	N	NA	NA	NA	NA	Bluff undifferentiated. Silty clay from 0 to 6.5 and 13 to 17.5+ feet. Transition area between site and Bluff.
W-3S	12620.5319	10942.3248	NA	N	NA	NA	NA	NA	Bluff undifferentiated. Clayey silt from 11.7 to 27+ feet. Transition area between site and Bluff.
W-4S	12920.1090	10239.8258	NA	N	NA	NA	NA	NA	Bluff undifferentiated. Clayey silt from 0 to 3.3, 16.4 to 19.5, 25.5 to 30, and 31.3 to 32.5+ feet. Transition area between site and Bluff.
W-5S	8894.2789	9008.7543	Y	Y	Clayey silt, silt	5.6 to 16.1	10.5	467.6 to 457.1	
W-6S	11707.6205	10432.6868	Y	Y	Peat (9.7 to 10 feet)	9.7 to 10+	>0.3	467.3 to 467(-)	
W-7S	11951.8224	9957.1852	Y	Y	Peat (6.9 to 7.5 feet)	6.9 to 7.5+	>0.6	465.1 to 464.5(-)	
W-8S	12120.5692	9685.3474	Y	Y	Peat (61.1 to 62.5 feet)	61.1 to 62.5+	>1.4	457.5 to 456.1(-)	
W-9S	11749.5717	9464.4174	Y	Y	Peat (53.7 to 55 feet)	53.7 to 55+	>1.3	459.8 to 458.5(-)	
W-10S	12750.7969	9624.1327	Y	Y	Peat (43.7 to 46 feet)	43.7 to 46+	>2.3	463.9 to 461.6(-)	
W-11I	12265.4436	9531.5514	Y	Y	Peat (58 to 65 feet)	58 to 65	7	455.9 to 448.9	
W-11S	12246.1281	9522.9441	Y	Y	Peat (57.3 to 58 feet)	57.3 to 58+	>0.7	454.9 to 454.2(-)	
W-12D	10916.2581	10964.5687	Y	N	Clay	15.6 to 22.5	6.9	471.9 to 465	Bluff undifferentiated. Clay from 17 to 22.5 feet
W-12S	10908.5360	10972.0980	NA	N	NA	NA	NA	NA	Bluff undifferentiated. Clay from 15.6 to 17.5+ feet.
W-13D	11407.1948	10451.5496	Y	Y	Silty clay	16.5 to 35	18.5	467.6 to 466.6	
W-13S	11412.2555	10460.3423	Y	Y	Silty clay	16.5 to 35	18.5	467.6 to 466.6	Using Aquitard depth from W-13D.
W-14S	9490.6941	10043.1555	Y	Y	Clayey silt, clay	7.6 to 30+	>22.4	480.8 to 457.9(-)	
W-15S	10786.7553	9933.5774	Y	Y	Silty clay, silt	3.6 to 16.5	12.9	474.9 to 462	
W-16S	10573.8864	9186.5181	Y	Y	Silty clay, clay, sandy clay	2.8 to 14.5	11.7	467.9 to 456.2	
W-17S	11041.9970	9221.5000	NA	NA	NA	NA	NA	NA	See below for W-17D.
W-17D	11051.8485	9222.3478	Y	Y	Clay, silt	5.2 to 13.8	8.6	464.3 to 455.7	
W-18D	11968.9380	9005.1000	Y	Y	Peat (8.6 to 20 feet)	8.6 to 20	11.4	458.9 to 447.4	
W-18S	11959.6690	9004.5610	Y	Y	Peat (8.6 to 15 feet), clayey silt	8.6 to 20	11.4	458.9 to 447.4	Using Aquitard depth from W-18D.
W-19S	13024.8130	8978.7510	Y	Y	Peat (15.3 to 17.5 feet)	15.3 to 17.5+	>2.2	449 to 446.8(-)	
W-19D	13034.4424	8979.8885	Y	Y	Peat (15 to 20.3 and23 to 25.9 feet), clay	15 to 28.2	13.2	449 to 435.8	
W-20I	12243.4257	10530.0882	Y	Y	Silty clay, peat (18.2 to 19.6 feet)	16 to 24.1	8.1	471.5 to 463.4	
W-21D	11555.6918	9861.1682	Y	Y	Silty clay, clayey silt	3 to10.5	7.5	469.8 to 462.3	
W-22S	13209.1462	9839.2356	NA	Y	NA	NA	0	NA	Interpreted to be top of LA (no Aquitard). Transition area between site and Bluff.
HS-01	12302.2430	10048.1992	Y	Y	Peat (8.5 to 10 feet)	8.5 to 10+	>1.5	464.4 to 462.9(-)	
HS-02	12876.8929	9853.2980	Y	Y	Peat (6.4 to 13.5 feet)	6.4 to 13.5	7.1	467.6 to 460.5	
HS-03	12123.1608	9321.5761	Y	Y	Peat (6.4 to 8 feet)	6.4 to 8+	>1.6	458.9 to 457.3(-)	
HS-04	12700.4022	9445.9233	Y	Y	Peat (9.2 to 10 feet)	9.2 to 10+	>0.8	459.5 to 458.7(-)	
HS-05	12362.3532	9421.5722	Y	Y	Peat (14 to 16 feet)	14 to 16+	>2	454 to 452(-)	
HS-06	12374.8800	9386.3390	NA	NA	NA	NA	NA	NA	See below for HS-07.
HS-07	12383.9923	9391.9875	Y	Y	Peat (13 to 21 feet), clay	13 to 22	9	453.5 to 444.5	
HS-08	12645.4329	10165.2541	Y	Y	Peat (6.2 to 8 feet)	6.2 to 8+	>1.8	456.7 to 454.9(-)	
HS-09	12379.6180	9281.0909	Y	Y	Peat (6 to 9 feet)	6 to 9+	>3	455.6 to 452.6	
HS-10	12287.7129	9073.3202	Y	Y	Peat (15.8 to 18 feet)	15.8 to 18+	>2.2	452.1 to 449.9(-)	
HS-11	12567.7688	8953.1501	Y	Y	Peat (18 to 20 feet)	18 to 20+	>2	447.7 to 445.7(-)	
HS-12	12358.4353	8727.4114	NA	NA	NA	NA	NA	NA	See below for HS-13.
HS-13	12358.4353	8727.4114	Y	Y	Peat (13.2 to 23 feet)	13.2 to 23	9.8	445.2 to 435.4	
PS-01	10061.2590	9288.9254	Y	Y	Clayey silt	3 to 19	16	474.2 to458.2	
PS-02S	10035.6443	9991.5988	Y	N	Clayey silt	2 to 13+	>11	NA	See below for PS-02
PS-02	10035.6443	9991.5988	Y	N	Clayey silt	3 to 26.5	23.5	484.5 to 461	

TABLE 4-2C

Aquitard Thickness and Description
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Location	Easting	Northing	Aquitard	Fill	Description	Interval	Thickness	Elevation (asl)	Comments
PS-03	11333.2029	10635.6686	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
PS-04	11581.3326	10664.1127	Y	N	Clayey/sandy silt, peat (10 to 12 feet)	0 to 17	17	480.9 to 463.9	
PS-05/PS-05R	11959.6200	10251.1727	Y	Y	Clayey silt, Peat (7 to >8 feet)	3 to 8+	>5	470.84 to 465.84 (-)	
PS-06	12320.0605	10215.1185	Y	Y	Clayey/sandy silt	5 to 10	5	469.9 to 464.9	
PS-07	12291.7952	10048.3434	Y	Y	Peat (5 to 10 feet)	5 to 10	5	468 to 463	
PS-08	12866.2403	9844.9308	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
PS-09	11589.7044	9875.2579	Y	Y	Peat (4 to 9 feet)	4 to 9	5	468.8 to 463.8	
PS-10	12275.5498	9068.8021	Y	Y	Peat (18 to 25 feet)	18 to 25	7	450 to 443	
PS-11	9167.1200	8992.1700	Y	Y	Clayey silt	10 to 17	7	463.4 to 456.4	
PS-12	11693.7900	11094.9800	Y	N	Clayey silt, clay	10 to 25.5	15.5	466 to 470.5	
PS-13	11905.1900	11109.4000	Y	N	Silty clay, clay	7 to 13	6	489.1 to 483.1	
PS-14	11874.7200	10917.8700	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
PS-15	11687.3186	10714.6704	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
PS-16	12412.9200	10350.3500	Y	Y	Peat (18 to 19 feet)	18 to 19+	>1	467 to 466	
PS-17	12354.3600	9341.2300	Y	Y	Peat (8.5 to 9 feet).	8.5 to 9+	>0.5	454.7 to 454.2(-)	
Phase II RI Boreholes									
SB-01/MW-20B	9168.0422	9008.0751	Y	Y	Silty Clay (7.5 to 15 feet)	7.5 to 15	7.5	466.19 to 458.69	
SB-02/MW-21B	12362.5538	9370.9304	Y	Y	Peat (13 to 19.5 feet), silty clay (19.5-21 feet)	13 to 21	8	452.59 to 444.59	
SB-03/MW-22T/B	10123.8672	9142.1131	Y	Y	Sandy Clay (12 to 16.5 feet)	12 to 16.5	4.5	462.93 to 458.43	
SB-4	11387.9936	9688.1117	Y	Y	Clayey Silty Sand (5-6.5)	5-6.5	1.5	469.63 to 468.13	
SB-5	10302.4864	10365.4650	Y	Y	Silty clay and clayey silt (2.5 to 25.5 feet)	2.5 to 25.5	23	481.35 to 458.35	
SB-6	10342.2100	10316.2600	Y	Y	Silty Clay, sand, and silt (4 to 32 feet)	4 to 32	28	479.85 to 451.85	
SB-7	11643.4058	10065.8463	Y	Y	Sandy Silt	2 to 10	8	472.71 to 464.71	Sandy silt material classified as fill because it appeared disturbed; however, anthropogenic material is not present. Therefore, it is considered aquitard material.
SB-8	12462.6600	10083.1300	Y	Y	Peat and silty clay (5 to 10 feet)	5 to 10	5	471.59 to 466.59	
SB-09/MW-23U/T	10855.9811	9208.8014	Y	Y	Sandy Clay, Silty Clay, and Sand (5 to 15.5 feet)	5 to 15.5	10.5	464.24 to 453.74	
SB-10/MW-24U	11205.2575	9247.4334	Y	Y	Clayey silt, silty clay, and sandy clay (5 to 16 feet)	5 to 16	11	463.02 to 452.02	
SB-11	11778.0817	9309.7702	No	Y	NA	NA	0	NA	Aquitard not encountered.
SB-12	11781.2534	9436.1547	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
SB-13	11955.9762	9598.3491	Y	Y	Silty Clay and Peat (55 to 61+ feet)	55 to 61+	6+	464.45 to 458.45(-)	
SB-14	12269.3721	9670.8782	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
SB-15	12337.8971	9836.6297	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
SB-16	12570.5023	9715.2183	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
SB-17	12826.2063	9665.1829	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
SB-18	12886.7044	9508.3415	Y	Y	Peat (5 to 15 feet)	5 to 15	10	465.77 to 455.77	
SB-19	12297.0300	9228.7200	Y	Y	Peat, Silty Clay, and Clayey Silt (5 to 20 feet)	5 to 20	15	457.05 to 442.05	
SB-20	13024.9011	9350.7667	Y	Y	Peat and silty clay (5 to 14 feet)	5 to 14	9	460.64 to 451.64	
SB-21/MW-25T/B	13343.4067	9437.2239	Y	N	Peat and sandy silty clay (0 to 15 feet)	0 to 15	15	469.61 to 454.61	
SB-22/MW-26U/T/B	13343.1060	8947.8112	Y	Y	Peat and silty clay (15 to 30 feet)	15 to 30	15	449.34 to 434.34	
SB-23/MW-27T	11974.6886	9011.5260	Y	Y	Silt and Peat (7 to 15 feet)	7 to 15	8	459.73 to 451.73	
SB-24/MW-28T	12572.6073	8946.0035	Y	Y	Peat and Gravelly Silt (15 to 35 feet)	15 to 35	20	450.18 to 430.18	
SB-25	12790.3320	9064.5294	NA	Y	NA	NA	NA	NA	Assumed to be above Aquitard materials.
SB-26	12987.2450	9061.1090	Y	Y	Peat (12 to 15+ feet)	12 to 15+	3+	452.86 to 449.86(-)	
SB-27/MW-29U/B	12270.1628	8434.2169	Y	Y	Peat, clayey silt, and silty clay (18 to 30 feet)	18 to 30	12	440.55 to 428.55	
SB-28/MW-41U/B	12034.1676	10776.6230	Y	Y	Clayey Silt, silty clay, sand, and silt (10 to 35 feet)	10 to 35	25	476.89 to 451.89	
SB-29	12186.3392	10828.1056	Y	Y	Sandy sitly clay, silt, silty clay, and peat (10 to 30 feet)	10 to 30	20	479.03 to 459.03	
SB-30/MW-30T	11811.0852	10715.2465	Y	Y	Sandy and silty clay (14 to 19 feet)	14 to 19	5	470.29 to 465.29	
SB-31	12133.8491	10593.6874	Y	Y	Peat and sandy clayey silt (15 to 18 feet)	15 to 18	3	471.06 to 468.06	
SB-32	12400.4540	10422.7341	Y	Y	Silty clay, sand, and sandy silt (14 to 26 feet)	14 to 26	12	469.81 to 457.81	
SB-33/MW-31T	10909.4408	10960.4987	Y	N	Silty Clay (17 to 22.5 feet)	17 to 22.5	5.5	469.48 to 463.98	
SB-34/MW-32T	12088.0816	11166.2683	Y	N	Silty Clay, Sand, Silt (25 to 50 feet)	25 to 50	25	480.78 to 455.78	
SB-35/MW-33T	12613.2514	10942.4388	Y	N	Silty Clay (50 to 54 feet)	50 to 54	4	471.25 to 467.25	
SB-36/MW-34T	12941.5480	10244.4524	Y	N	Silty Clay (33 to 39.5 feet)	33 to 39.5	6.5	483.79 to 477.29	
SB-37/MW-36T	13048.5396	8971.3184	Y	Y	Peat, clayey silt, and silty clay (10 to 28 feet)	10 to 28	18	453.9 to 435.9	
SB-38/MW-37U	11894.5028	9293.7056	No	Y	NA	NA	0	NA	Aquitard not encountered.
SB-39/MW-38B	12230.6369	10205.5951	Y	Y	Clayey silt, peat, sandy clay, and silty clay (1 to 15.5 feet)	1 to 15.5	14.5	473.3 to 458.8	
SB-40/MW-35U/T	12530.5126	9448.6808	Y	Y	Peat and Silty Clay (15 to 18 feet)	15 to 18	3	453.89 to 450.89	
SB-41/MW-39U	12376.2863	9157.1923	Y	Y	Peat (11 to 15+ feet)	11 to 15+	4+	455.96 to 451.96(-)	
SB-42/MW-40B	13197.6239	9798.4635	Y	Y	Silty clay (9.5 to 10 feet)	9.5 to 10	0.50	464.82 to 464.32	
SB-45/MW-42B	11567.5601	9266.4872	Y	Y	Peat and clayey silt (5 to 10 feet)	5 to 10	5	463.10 to 458.10	
SB-46/MW-43U	11746.2892	10167.4255	Y	Y	Organic silt and sandy silt (9 to 15+ feet)	9 to 15+	6+	466.13 to 460.13(-)	
SB-53/MW-44T/B	8931.0449	8280.4578	Y	N	Clay (2.5 to 5)	2.5 to 5	2.50	461.32 to 458.82	
SB-49/MW-45B	8781.6088	7663.4670	Y	N	Clay (20 to 37)	4 to 6.5	2.50	450.80 to 448.30	
SB-50/MW-46T/B	10969.8102	8348.4784	Y	N	Clayey silt and sandy clay (4.5 to 9 feet)	4.5 to 9	4.50	456.82 to 452.32	
SB-47/MW-47T/B	11729.5493	8843.8214	Y	Y	Clay and sandy clay (4.5 to 8.5 feet)	4.5 to 8.5	4.00	461.38 to 457.38	
SB-48/MW-48T/B	11555.4830	8269.5449	N	Y	NA	NA	0.00	NA	Aquitard not encountered.
SB-54/MW-49B	14145.9670	9063.0306	Y	N	Clay and Peat (0 to 19.5 feet)	0 to 19.5	19.50	455.25 to 436.25	
SB-52/MW-50T/B	14805.2746	9444.3629	Y	Y	Clay (44 to 50 feet)	44 to 50	6.00	440.95 to 434.95	
SB-51/MW-51B	13555.4876	10440.5878	Y	N	Clay (20 to 37)	20 to 37	17	493.99 to 476.99	
TW-01U	12118.9734	9346.8624	Y	Y	Peat (11 to 12+ feet)	11 to 12+	1+	453.9 ot 452.9(-)	
TW-02U	12129.0316	9276.1220	Y	Y	Peat (5 to 10+ feet)	5 to 10+	5+	458.52 to 453.52(-)	

TABLE 4-2C

Aquitard Thickness and Description
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Location	Easting	Northing	Aquitard	Fill	Description	Interval	Thickness	Elevation (asl)	Comments
TW-03U	12122.8077	9228.8741	Y	Y	Peat (3 to 5+ feet)	3 to 5+	2+	458.91 to 456.91(-)	
TW-04U	12148.9258	9125.5794	Y	Y	Sandy, clayey silt and peat (5 to 15+ feet)	5 to 15+	10+	461.25 to 451.25(-)	
TW-05U	12544.1411	9393.1681	Y	Y	Peat (10 to 15+ feet)	10 to 15+	5+	455.67 to 450.67(-)	
TW-06U	12552.6560	9326.6337	Y	Y	Peat (5 to 10.5+ feet)	5 to 10.5+	5.5+	457.85 to 452.35(-)	
TW-07U	12554.1013	9314.7053	Y	Y	Peat and Silty Clay (3.5 to 10+ feet)	3.5 to 10+	6.5+	458.84 to 452.34(-)	
TW-08U	12584.5634	9163.9344	Y	Y	Sandy silt and peat (8-21+ feet)	8 to 21+	13+	456.78 to 443.78(-)	

Notes:
NA = Not Applicable
LA = Lower Aquifer
asl = above sea level

TABLE 4-5B

Summary of Sequential Batch Evaluation
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Parameter	Aquitard Material								Lower Aquifer Material					
	Peat 1		Peat 2		Silty Clay 1		Silty Clay 2		AQ 1a (SI SND)		AQ 1b (SI SG)		AQ 2 (SI SND)	
Aluminum	SEQ		ND		SEQ		LEACHABLE		LEACHABLE		SEQ		LEACHABLE	
Arsenic	ND		ND		ND		ND		ND		ND		ND	
Barium	ND		ND		ND		LEACHABLE		LEACHABLE		LEACHABLE		LEACHABLE	
Beryllium	ND		ND		ND		LEACHABLE		ND		ND		ND	
Cadmium	SEQ		SEQ		SEQ	E	SEQ	E	SEQ	E	SEQ		SEQ	
Chromium	ND		ND		ND		LEACHABLE		ND		ND		ND	
Cobalt	SEQ	E	ND		SEQ	E	ND		NONE		SEQ	E	ND	
Copper	SEQ		SEQ		SEQ		LEACHABLE		SEQ		SEQ		LEACHABLE	
Iron	SEQ		ND		SEQ		LEACHABLE		LEACHABLE		SEQ		LEACHABLE	
Lead	SEQ		LEACHABLE		SEQ		LEACHABLE		SEQ		SEQ		NONE	
Manganese	SEQ	E	SEQ		SEQ	E	LEACHABLE		LEACHABLE		SEQ	E	SEQ	E
Mercury	ND		ND		ND		ND		ND		ND		ND	
Nickel	SEQ	E	ND		SEQ	E	LEACHABLE		NONE		SEQ	E	NONE	
Selenium	ND		ND		ND		ND		ND		ND		ND	
Silver	ND		ND		ND		ND		ND		ND		ND	
Thallium	ND		ND		ND		ND		ND		ND		ND	
Vanadium	ND		ND		ND		LEACHABLE		LEACHABLE		LEACHABLE		LEACHABLE	
Zinc	SEQ	E	SEQ		SEQ	E	SEQ	E	SEQ	E	SEQ	E	SEQ	E

Notes:

SEQ= Sequestered
LEACHABLE= Possibly Leached but Metal not Observed in Supernatant Water at Elevated Levels above Source water
ND= Nondetect/essentially non-detect in source water and sequestered metals observed in soil
NONE= No Significant Sequestration Effect
E= Sequestration Capacity Nearly Exhausted after 10 days
PEAT 1, Silty Clay 1, and AQ 1a,1b = composite samples from south side of Slag Pile Area
PEAT 2, Silty Clay 2, and AQ 2= composite samples from south side of Lithopone Area

TABLE 4-12

Summary of Bi-Weekly Shoreline Seep Evaluations
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

	Date	9/9/2010		9/15/2010 (Revisit)		9/22/2010		10/7/2010		10/20/2010	
Seep	**Elevation**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**
SP-01	444.23	Large	33	NM	NM	Large	31	Large	37	Large	35
SP-02	446.76	Medium	40	NM	NM	Medium	38	Medium	42	Medium	40
SP-03	444.24	Small	15	NM	NM	Small	15	Medium	23	Large	20
SP-04	448.27	Small	95	NM	NM	Medium	92	Medium	123	Medium	125
SP-05	441.80	Medium	13	NM	NM	Medium	12	Large	16	Large	15
SP-06	442.17	Large	32	NM	NM	Large	30	Large	40	Large	40
SP-07	441.26	Medium	4	NM	NM	Large	5.5	Large	10	Large	7
SP-08	444.71	Large	Approx. 175	Medium	Approx. 350	Large	Approx. 175	Medium	Approx. 250	Medium	Approx. 250
SP-09	448.76	Medium	67	NM	NM	Large	67	Large	NM	Medium	67
SP-10	442.81	Large	Approx. 200	Large	Approx. 225	Medium	Approx. 200	Medium	Approx. 300	Medium	Approx. 300

Notes:

NM = Not Measured
NA = Not Accessible due to snow/ice/vegetation
NP = Not Present due to high lake level
ANP = Access Not Permited by property owner

TABLE 4-12

Summary of Bi-Weekly Shoreline Seep Evaluations
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

	Date	11/2/2010		11/18/2010		12/1/2010		12/17/2010		12/30/2010		1/13/2011	
Seep	**Elevation**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**
SP-01	444.23	Large	35	Large	35	Large	29	Large	28	Large	Approx. 28	NA	NA
SP-02	446.76	Medium	41	Small	42	Small	35	Medium	38	Medium	Approx. 35	Medium	Approx. 30
SP-03	444.24	Medium	21	Small	21	Small	15	Small	15	Medium	Approx. 10	Medium	20
SP-04	448.27	Medium	115	Large	115	Large	100	Large	115	Large	115	NA	NA
SP-05	441.80	Large	17	Large	18	Large	13	Large	8	Large	10	Large	NA
SP-06	442.17	Large	40	Large	37	Large	30	Large	18	Large	Approx. 20	Large	NA
SP-07	441.26	Large	7	Large	6	Large	<1	Large	0	Large	0	NA	NA
SP-08	444.71	Medium	Approx. 160	Medium	Approx. 150	Medium	150	Large	Approx. 100	Large	Approx. 100	Large	Approx. 100
SP-09	448.76	Large	73	Large	Approx. 180	Large	70	Large	Approx. 55	Large	Approx. 50	Large	Approx. 50
SP-10	442.81	Large	Approx. 175	Large	Approx. 180	Medium	100	Medium	Approx. 150	Medium	Approx. 180	Large	NA

Notes:

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TABLE 4-12

Summary of Bi-Weekly Shoreline Seep Evaluations
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

	Date	1/28/2011		2/8/2011		2/25/2011		3/10/2011		3/24/2011		4/7/2011	
Seep	Elevation	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)
SP-01	444.23	Large	Approx. 25	NA	NA	NP	NP	NP	NP	NP	NP	Large	20
SP-02	446.76	Medium	Approx. 40	Medium	Approx. 25	NP	NP	NP	NP	Medium	Approx. 5	Medium	25
SP-03	444.24	Medium	Approx. 15	Medium	Approx. 15	NP	NP	NP	NP	NP	NP	Medium	10
SP-04	448.27	Large	Approx. 115	Large	NA	Large	33	Large	Approx. 20	Large	45	Medium	50
SP-05	441.80	NA	NA	NA	NA	NP	NP	NP	NP	NP	NP	NP	NP
SP-06	442.17	Large	Approx. 20	Large	Approx. 12	NP	NP	NP	NP	NP	NP	Large	22
SP-07	441.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-08	444.71	Large	Approx. 130	Large	Approx. 120	Large	10	NP	NP	NP	NP	Large	96
SP-09	448.76	Large	Approx. 50	Large	Approx. 50	Large	18	NP	NP	NP	NP	Large	55
SP-10	442.81	NA	NA	NA	NA	NP	NP	NP	NP	NP	NP	Large	40

Notes:

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TABLE 4-12

Summary of Bi-Weekly Shoreline Seep Evaluations
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

	Date	4/21/2011		5/5/2011		5/19/2011		6/2/2011		6/16/2011		6/30/2011	
Seep	**Elevation**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**	**Size**	**Distance to Lake Edge (ft)**
SP-01	444.23	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-02	446.76	Medium	0	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-03	444.24	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-04	448.27	Large	40	NP	NP	Large	41	NP	NP	NP	NP	NP	NP
SP-05	441.80	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-06	442.17	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-07	441.26	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-08	444.71	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-09	448.76	Medium	20	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
SP-10	442.81	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

Notes:

NM = Not Measured
NA = Not Accessible due to snow/ice/vegetation
NP = Not Present due to high lake level
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TABLE 4-12

Summary of Bi-Weekly Shoreline Seep Evaluations
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

	Date	7/14/2011		7/26/2011		8/11/2011		8/25/2011		Number of Events Seep was Large	Number of Events Seep was Medium	Number of Events Seep was Small
Seep	Elevation	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)	Size	Distance to Lake Edge (ft)			
SP-01	444.23	Large	29.5	Large	4	Large	23	Large	25	15	0	0
SP-02	446.76	Medium	35.5	Medium	17	Medium	29	Medium	32	0	17	2
SP-03	444.24	Large	18	Large	2	Large	13	Large	14	5	7	5
SP-04	448.27	Large	Approx. 108	Large	Approx. 30	Large	86	Medium	97	14	6	1
SP-05	441.80	ANP	ANP	ANP	ANP	ANP	ANP	ANP	ANP	8	2	0
SP-06	442.17	ANP	ANP	ANP	ANP	ANP	ANP	ANP	ANP	13	0	0
SP-07	441.26	ANP	ANP	ANP	ANP	ANP	ANP	ANP	ANP	8	1	0
SP-08	444.71	Small	Approx. 120	Large	4	Medium	NM	Medium	NM	10	8	1
SP-09	448.76	Medium	Approx. 65	NA	NA	Large	63	Medium	NM	13	5	0
SP-10	442.81	Medium	Approx. 140	NA	NA	Medium	35	Medium	Approx. 100	6	9	0

Notes:

NM = Not Measured
NA = Not Accessible due to snow/ice/vegetation
NP = Not Present due to high lake level
ANP = Access Not Permited by property owner

TABLE 4-16

Comparison of Seepage Velocity Calculations to Lift Station Flow - IRM Wall Evaluation
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Date	Total Water Volume to Interim Water Treatment Plant (Gal)	Estimated Volume of IWTP Inflow From the North Ditch[1] (Gal)	Estimated Volume of IWTP Inflow From the IRM Wall/Interceptor Trench System[2] (Gal)	Discharge per Unit Width (ft^2/day)			Estimated Volume of Groundwater Flowing Between HS-03(S) and TW-05[3] (Gal/day.)			Percentage of the Maximum Groundwater Flux between HS-03(S) and TW-05 Captured by the IRM Wall/Interceptor Trench System	Estimated Volume of Groundwater Flowing Between PZ-04(S)R and PZ-3(S)[6] (Gal.)			Percentage of the Maximum Groundwater Flux between HS-03(S) and TW-05 Captured by the IRM Wall/Interceptor Trench System
				Min	Max	Geomean	Min	Max	Geomean		Min	Max	Geomean	
7/19/2010[4]	106,497	31,949	74,548	0.57845	5.88967	1.85384	1,839	18,723	5,893	NA	6,274	63,879	20,107	NA
9/14/2010[5]	14,035	4,211	9,825	0.54388	5.53749	1.74299	1,729	17,604	5,541	56%	5,899	60,060	18,904	16%
11/15/2010[5]	18,956	5,687	13,271	0.47449	4.83115	1.52068	1,508	15,358	4,834	86%	5,146	52,399	16,493	25%
2/14/2011[4]	46,973	14,092	32,881	0.36996	3.76891	1.18568	1,176	11,975	3,769	NA	4,013	40,856	12,860	NA
5/16/2011[4]	56,246	16,874	39,372	0.50792	5.17152	1.62780	1,615	16,440	5,175	NA	5,509	56,090	17,655	NA

Notes:

IWTP: Interim Water Treatment Plant

NA: Not Applicable due to elevated discharge amounts of surface water to IWTP due to rainfall or snowmelt

[1] *Estimated 30% of total flow is from the North Ditch under normal conditions*

[2] Estimated 70% of total flow to the IWTP is from the IRM Wall/Interceptor Trench System under normal conditions

[3] The distance between HS-03(S) and TW-05 is approximately 425 feet

[4] High discharge amounts to the IWTP due to rainfall or snowmelt

[5] Baseline condition

[6] *The distance between PZ-04(S)R and PZ-03(S) is approximately 1,450 feet*

TABLE 5-9A

Comparison of Spring N003 to Adjacent Upgradient Monitoring Wells
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Sample Location	Aquifer	Notes	Sample Date	Aluminum (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Manganese (ug/L)	Mercury (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)	Ammonia (mg/L)	Fluoride (mg/L)	Nitrate/Nitrite (mg/L)	Nitrite-N (mg/L)	Phosphorus, Total (mg/L)	Sulfate (mg/L)
HCOPC Screening Level				3,500	10	2,000	4.0	5.0	NE	100	1,000	650	5,000	7.5	150	2.0	100	50	50	2.0	49	5,000	NE (35)[1]	4.0	10	1.0	NE	400
Spring - Upland Portion of the Southeast Area																												
N003			8/17/2007	17.1 U	3.2 U	114 J	0.40 U	2.7 U	NA	0.60 U	6.5 U	1.1 U	15,300	1.3 U	659	0.10 U	1.2 U	2.3 U	0.60 U	0.014 U	0.60 U	70.1	88.5	0.200 U	0.0367 J	0.0500 U	6.06	1,240
			7/2/2008	55.6 B	6.6 J	129 B	0.18 U	3.3 B	NA	0.66 U	4.1 UJ	38.2	13,900	6.5	617	0.1 U	0.76 U	4.4 U	0.51 U	0.068 U	1.1 U	859	62.8	0.275	0.05 U	0.05 U	4.75	1,080 J
Monitoring Wells - Upland Portion of the Southeast Area																												
MW-39 (U)	UWBZ		11/14/2007	14.7 U	7.4 U	128 B	0.2 U	0.5 U	NA	1.5 U	1.6 U	1.7 U	4,440	2.1 U	1,240	0.1 U	1.7 U	3.3 U	0.5 U	0.007 U	0.53 U	18.2 U	2.54	0.24	0.05 U	0.05 U	0.203 B	100
			7/1/2008	39.7 U	3.2 UN	152 B	0.18 U	0.89 U	NA	0.66 U	4.1 UJ	0.62 U	6,040	1.5 U	1,330	0.1 U	0.76 U	4.4 U	0.51 U	0.068 U	0.52 U	4.8 U	2.38	0.305	0.0191 UJ	0.05 U	0.188 B	323
W-18 (S)	UWBZ		8/16/2007	17.1 U	3.2 U	260	0.40 U	0.61 U	NA	0.60 U	1.7 U	1.1 U	13,000 J	1.5 U	451	0.10 U	1.2 U	2.3 U	0.60 U	0.007 U	0.60 U	11.1 UJ	6.04	0.180 B	0.0680 U	0.0500 U	0.875	105
			7/2/2008	39.7 U	NA	NA	NA	NA	NA	NA	NA	NA	3,740	NA	183	0.1 U	NA	NA	NA	0.068 U	NA	NA	NA	NA	NA	0.05 U	NA	NA
W-18 (D)	BOLA		8/17/2007	17.1 U	3.2 U	25.7 J	0.40 U	0.50 U	NA	0.60 U	6.1	1.1 U	4,430	1.3 U	1,090	0.10 U	4.1 B	2.3 U	0.60 U	0.007 U	0.60 U	658	61.8	0.310	0.0239 J	0.0500 U	10.4	524
			7/1/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,250	NA	1,000	NA	NA	NA	NA	0.068 U	NA	NA	62.1	NA	NA	0.05 U	2.29 J	465 J
MW-27 (T)	TOLA		11/14/2007	95.1 U	3.6 U	40.1 B	0.2 U	1.4 B	NA	1.4 U	4.2 B	8.7	1,030	9.8	765	0.1 U	6.5 B	3.3 U	0.5 U	0.007 U	0.88 U	490	5.16	0.44	0.912	0.05 U	1.77	364
			7/1/2008	39.7 U	3.2 U	24.5 J	0.18 U	0.89 U	NA	0.66 U	4.1 UJ	0.62 U	4,040 J	1.5 U	1,190	0.1 U	9.5 B	4.4 U	0.51 U	0.068 U	0.52 U	747	88.3	0.345	0.05 U	0.05 U	13.9	475

Key:

Shading indicates that the detected concentration is above the screening value.
B= The result was lower than the Contract Required Detection Limit but equal to or greater than the Instrument Detection Limit. [Metals]
B= The analyte was detected in the method blank. [Non-Metal Inorganic Parameters]
BLUFF= Bluffs Undifferentiated
BOLA= Bottom of Lower Aquifer
D= The reported value is from a dilution
E= The reported value is estimated because of the presence of interference
J= The concentration is estimated because the concentration was below the sample detection limit
N= The spiked sample recovery was not within the control limits
NA= Not Analyzed
NE= Not Established
TOLA= Top of Lower Aquifer
U= Sample was not detected above the listed detection limit
UWBZ= Upper Water-Bearing Zone

Note:

[1]= The ammonia data was screened using 35 mg/L per the April 20, 1993 CORE Group memorandum.
[2]= The seep data presented in this table are for unfiltered samples.

TABLE 5-9B

Comparison of Spring N004 to Adjacent Upgradient Monitoring Wells
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Sample Location	Aquifer	Notes	Sample Date	Aluminum (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Manganese (ug/L)	Mercury (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)	Ammonia (mg/L)	Fluoride (mg/L)	Nitrate/Nitrite (mg/L)	Nitrite-N (mg/L)	Phosphorus, Total (mg/L)	Sulfate (mg/L)
HCOPC Screening Level				3,500	10	2,000	4.0	5.0	NE	100	1,000	650	5,000	7.5	150	2.0	100	50	50	2.0	49	5,000	NE (35)[1]	4.0	10	1.0	NE	400
Spring - Upland Portion of the Southeast Area																												
N004			8/17/2007	247	3.2 U	106 J	0.40 U	3.9 B	NA	0.60 U	2.4 B	146	938	10.0	1,240	0.10 U	2.6 B	2.3 U	0.60 U	0.029 U	0.84 U	735	50.4	0.595	0.687 J	0.215	28.9	848
			7/2/2008	121 B	3.2 UN	100 B	0.18 U	0.89 U	NA	0.66 U	4.1 UJ	12.5	302	2.4 B	1,410	0.1 U	1.6 U	4.4 U	0.51 U	0.068 U	0.78 U	195	67	0.47	0.0326 U	0.05 U	5.14	778 J
Monitoring Wells - Upland Portion of the Southeast Area																												
HS-12 (S)	UWBZ		8/17/2007	17.1 U	16.7	154 J	0.40 U	0.50 U	NA	0.60 U	1.7 U	1.1 U	4,550	2.2 U	2,410	0.10 U	1.2 U	2.3 U	0.60 U	0.021 U	0.60 U	184	9.75	0.955	0.0226 J	0.0500 U	0.842	560
			7/2/2008	39.7 U	11.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,310	NA	NA	NA	NA	0.068 U	NA	NA	NA	NA	NA	NA	NA	483 J
HS-13 (I)	TOLA		8/17/2007	17.1 U	3.2 U	168 J	0.40 U	0.96 U	NA	0.60 U	1.7 U	1.1 U	28,200	1.3 U	1,080	0.10 U	1.2 U	2.3 U	0.60 U	0.007 U	0.60 U	2.0 U	143	0.200 U	0.0137 J	0.0500 U	11.1	1,410
			7/2/2008	39.7 U	NA	NA	NA	NA	NA	NA	NA	NA	27,600	NA	976	NA	NA	NA	NA	0.068 U	NA	NA	144	1 UJ	NA	R	60.1	1,480 J

Key:

Shading indicates that the detected concentration is above the screening value.
B= The result was lower than the Contract Required Detection Limit but equal to or greater than the Instrument Detection Limit. [Metals]
B= The analyte was detected in the method blank. [Non-Metal Inorganic Parameters]
BLUFF= Bluffs Undifferentiated
BOLA= Bottom of Lower Aquifer
D= The reported value is from a dilution
E= The reported value is estimated because of the presence of interference
J= The concentration is estimated because the concentration was below the sample detection limit
N= The spiked sample recovery was not within the control limits
NA= Not Analyzed
NE= Not Established
TOLA= Top of Lower Aquifer
U= Sample was not detected above the listed detection limit
UWBZ= Upper Water-Bearing Zone

Note:

[1]= The ammonia data was screened using 35 mg/L per the April 20, 1993 CORE Group memorandum.
[2]= The seep data presented in this table are for unfiltered samples.

TABLE 5-9C

Comparison of Spring N005 to Adjacent Upgradient Monitoring Wells
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Sample Location	Aquifer	Notes	Sample Date	Aluminum (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Cadmium (ug/L)	Calcium (ug/L)	Chromium (ug/L)	Cobalt (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Manganese (ug/L)	Mercury (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Silver (ug/L)	Thallium (ug/L)	Vanadium (ug/L)	Zinc (ug/L)	Ammonia (mg/L)	Fluoride (mg/L)	Nitrate/Nitrite (mg/L)	Nitrite-N (mg/L)	Phosphorus, Total (mg/L)	Sulfate (mg/L)
HCOPC Screening Level				3,500	10	2,000	4.0	5.0	NE	100	1,000	650	5,000	7.5	150	2.0	100	50	50	2.0	49	5,000	NE (35)[1]	4.0	10	1.0	NE	400
Spring - Upland Portion of the Southeast Area																												
N005			8/17/2007	17.1 U	3.2 U	35.7 J	0.40 U	0.50 U	NA	0.60 U	7.4	1.1 U	3,290	1.3 U	1,470	0.10 U	5.6 B	2.3 U	0.60 U	0.007 U	0.60 U	953	32.2	0.350	0.139 J	0.0500 U	5.46	464
			7/2/2008	39.7 U	3.2 UN	34.1 B	0.18 U	0.89 U	NA	0.66 U	4.1 UJ	0.62 U	4,280	1.5 U	1,290	0.1 U	7.6 B	4.4 U	0.51 U	0.068 U	0.52 U	972	28.1	0.38	0.0332 U	0.05 U	4.89	507
Monitoring Wells - Upland Portion of the Southeast Area																												
W-18 (S)	UWBZ		8/16/2007	17.1 U	3.2 U	260	0.40 U	0.61 U	NA	0.60 U	1.7 U	1.1 U	13,000 J	1.5 U	451	0.10 U	1.2 U	2.3 U	0.60 U	0.007 U	0.60 U	11.1 UJ	6.04	0.180 B	0.0680 U	0.0500 U	0.875	105
			7/2/2008	39.7 U	NA	NA	NA	NA	NA	NA	NA	NA	3,740	NA	183	0.1 U	NA	NA	NA	0.068 U	NA	NA	NA	NA	NA	0.05 U	NA	NA
W-18 (D)	BOLA		8/17/2007	17.1 U	3.2 U	25.7 J	0.40 U	0.50 U	NA	0.60 U	6.1	1.1 U	4,430	1.3 U	1,090	0.10 U	4.1 B	2.3 U	0.60 U	0.007 U	0.60 U	658	61.8	0.310	0.0239 J	0.0500 U	10.4	524
			7/1/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,250	NA	1,000	NA	NA	NA	NA	0.068 U	NA	NA	62.1	NA	NA	0.05 U	2.29 J	465 J
MW-27 (T)	TOLA		11/14/2007	95.1 U	3.6 U	40.1 B	0.2 U	1.4 B	NA	1.4 U	4.2 B	8.7	1,030	9.8	765	0.1 U	6.5 B	3.3 U	0.5 U	0.007 U	0.88 U	490	5.16	0.44	0.912	0.05 U	1.77	364
			7/1/2008	39.7 U	3.2 U	24.5 J	0.18 U	0.89 U	NA	0.66 U	4.1 UJ	0.62 U	4,040 J	1.5 U	1,190	0.1 U	9.5 B	4.4 U	0.51 U	0.068 U	0.52 U	747	86.3	0.345	0.05 U	0.05 U	13.9	475

Key:

Shading indicates that the detected concentration is above the screening value.
B= The result was lower than the Contract Required Detection Limit but equal to or greater than the Instrument Detection Limit. [Metals]
B= The analyte was detected in the method blank. [Non-Metal Inorganic Parameters]
BLUFF= Bluffs Undifferentiated
BOLA= Bottom of Lower Aquifer
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N= The spiked sample recovery was not within the control limits
NA= Not Analyzed
NE= Not Established
TOLA= Top of Lower Aquifer
U= Sample was not detected above the listed detection limit
UWBZ= Upper Water-Bearing Zone

Note:

[1]= The ammonia data was screened using 35 mg/L per the April 20, 1993 CORE Group memorandum.
[2]= The seep data presented in this table are for unfiltered samples.

ATTACHMENT 7

ATTACHMENT 7

Attachment 7

Mann-Kendall Results

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
Bluff Area																
W-02(S)	Bluff	Ammonia	8	3.4	506	288.1	140.6	399.5	210.2	74.33	-16	0.031	8.083	-1.856	0.0317	Decreasing
W-03(S)	Bluff	Ammonia	8	30.9	213	130.1	105	148	75.67	26.75	-12	0.089	8.083	-1.361	0.0868	No Trend
W-02(S)	Bluff	Arsenic	8	13.3	187	114.6	81.33	141.5	75.51	26.7	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-04(S)	Bluff	Arsenic	8	30	59.8	43.98	42.25	41.8	13.14	4.647	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-03(S)	Bluff	Arsenic	8	28.2	57	38.88	37.98	38.7	9.229	3.263	-6	0.274	8.083	-0.619	0.268	No Trend
W-02(S)	Bluff	Manganese	8	84.6	2380	1589	1035	2280	1027	363	-15	0.054	8.021	-1.745	0.0405	No Trend
W-03(S)	Bluff	Manganese	8	204	856	437.6	387.3	390.5	232.4	82.16	-2	0.452	8.083	-0.124	0.451	No Trend
W-04(S)	Bluff	Manganese	8	2.5	2110	903.1	159.3	691.5	942.6	333.3	-14	0.054	8.083	-1.608	0.0539	No Trend
W-03(S)	Bluff	Nitrate+Nitrite	8	0.0133	190	44.09	11.39	29.65	60.66	21.45	2	0.452	8.083	0.124	0.451	No Trend
W-04(S)	Bluff	Nitrate+Nitrite	8	0.025	94	50.45	18.46	43.95	37.2	13.15	-12	0.089	8.083	-1.361	0.0868	No Trend
W-02(S)	Bluff	Sulfate	8	67	3600	2346	1407	2810	1415	500.1	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-03(S)	Bluff	Sulfate	8	120	1570	618.1	409.5	374	565.1	199.8	-16	0.031	8.083	-1.856	0.0317	Decreasing
W-04(S)	Bluff	Sulfate	8	100	1900	858	481.4	507	812.5	287.3	-12	0.089	8.083	-1.361	0.0868	No Trend
MW-34T	TOLA	Ammonia	8	25.8	56	39.08	37.5	39	11.79	4.168	14	0.054	8.083	1.608	0.0539	No Trend
MW-33T	TOLA	Iron	8	1580	5570	2586	2395	2320	1269	448.5	-18	0.016	8.083	-2.103	0.0177	Decreasing
MW-34T	TOLA	Iron	8	9470	26700	18196	16997	17750	6889	2436	-20	0.007	8.083	-2.351	0.00937	Decreasing
MW-33T	TOLA	Manganese	8	136	273	181.4	177.1	171	44.59	15.77	0	0.548	8.083	N/A	N/A	No Trend
MW-34T	TOLA	Manganese	8	599	1350	849.9	826.2	800.5	230.5	81.5	-6	0.274	8.083	-0.619	0.268	No Trend
MW-34T	TOLA	Sulfate	8	330	1110	777.5	736.2	795	243.3	86.02	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-12(D)	BOLA	Arsenic	8	7.5	26	20.49	19.35	21.05	6.011	2.125	14	0.054	8.083	1.608	0.0539	No Trend
W-02(D)	BOLA	Iron	8	2580	11100	5120	4325	3010	3384	1196	8	0.119	8.083	0.866	0.193	No Trend
W-12(D)	BOLA	Iron	8	2610	6430	4845	4594	5355	1575	556.8	14	0.054	8.083	1.608	0.0539	No Trend
W-12(D)	BOLA	Manganese	8	2790	4330	3778	3740	4010	544.8	192.6	-16	0.031	8.083	-1.856	0.0317	Decreasing
W-02(D)	BOLA	Manganese	8	206	317	238.3	235.5	217.5	40.77	14.41	8	0.119	8.083	0.866	0.193	No Trend
W-02(D)	BOLA	Nickel	8	0.8	201	30.92	4.496	1.825	69.24	24.48	14	0.054	7.958	1.634	0.0512	No Trend
Eastern Area																
PS-04	Aquitard	Arsenic	8	1.6	19.7	10.1	8.247	9	5.753	2.034	-7	0.274	8.021	-0.748	0.227	No Trend
PS-04	Aquitard	Cadmium	8	141	1810	859.4	572.1	804.5	694.4	245.5	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-04	Aquitard	Fluoride	8	6.58	17	11.42	10.93	10.8	3.602	1.274	18	0.016	8.083	2.103	0.0177	Increasing
PS-04	Aquitard	Manganese	8	1440	12300	7259	5849	8465	4122	1457	-22	0.002	8.083	-2.598	0.00469	Decreasing
PS-04	Aquitard	Nickel	8	53.9	221	151.2	134.1	169	70.55	24.94	-22	0.002	8.083	-2.598	0.00469	Decreasing
PS-04	Aquitard	Sulfate	8	470	1560	1104	997.9	1290	473.8	167.5	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-04	Aquitard	Zinc	8	26100	122000	76413	66241	84150	38187	13501	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-05R	UWBZ	Aluminum	8	5570	18000	12184	11126	13050	5032	1779	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-13(S)	UWBZ	Aluminum	8	4460	105000	43504	28991	33250	35291	12477	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-06(S)	UWBZ	Aluminum	8	4360	8400	6050	5891	5675	1506	532.5	-14	0.054	8.083	-1.608	0.0539	No Trend
MW-01	UWBZ	Ammonia	8	0.46	79.6	24	6.277	17.95	28.4	10.04	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-03	UWBZ	Arsenic	8	31.9	108	69.76	66.15	70.05	22.68	8.02	4	0.36	8.083	0.371	0.355	No Trend
W-13(S)	UWBZ	Beryllium	8	1.65	5.8	3.181	2.9	2.55	1.483	0.524	-13	0.089	8.021	-1.496	0.0673	No Trend
PS-03	UWBZ	Cadmium	8	47.9	497	218.4	164.7	163	168.1	59.45	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-05R	UWBZ	Cadmium	8	267	982	605.3	545.1	597.5	277.1	97.96	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-06(S)	UWBZ	Cadmium	8	438	790	632.6	616.6	641.5	149.6	52.88	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-13(S)	UWBZ	Cadmium	8	1.9	21	8.05	5.783	8.7	6.409	2.266	-23	0.002	8.021	-2.743	0.00305	Decreasing
W-17(S)	UWBZ	Cadmium	9	81.3	191	129.6	125.5	122	34.63	11.54	-22	0.012	9.592	-2.189	0.0143	Decreasing
MW-01	UWBZ	Cadmium	8	12.85	182	101.8	72.84	100.9	64.94	22.96	-14	0.054	8.083	-1.608	0.0539	No Trend
PS-03	UWBZ	Fluoride	8	4.72	8.95	7.124	6.966	7.505	1.548	0.547	18	0.016	8.083	2.103	0.0177	Increasing
PS-05R	UWBZ	Fluoride	8	11	27.8	19.53	18.23	20.05	7.378	2.609	-14	0.054	8.083	-1.608	0.0539	No Trend
W-06(S)	UWBZ	Fluoride	8	12.7	23	16.78	16.5	16.75	3.338	1.18	-10	0.138	8.083	-1.113	0.133	No Trend
W-13(S)	UWBZ	Iron	8	62400	220000	150825	138756	163000	58908	20827	-24	0.001	8.083	-2.846	0.00222	Decreasing
MW-01	UWBZ	Iron	8	3.35	6500	1210	74.18	63.85	2285	807.9	9	0.119	8.021	0.997	0.159	No Trend
PS-05R	UWBZ	Lead	8	0.75	99.6	17.13	4.205	3.2	33.86	11.97	15	0.054	8.021	1.745	0.0405	No Trend
MW-01	UWBZ	Manganese	8	1100	2080	1514	1474	1460	378.1	133.7	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-03	UWBZ	Manganese	8	2790	8610	5358	4908	4740	2359	834.2	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-05R	UWBZ	Manganese	8	1150	8460	4913	3882	4965	2993	1058	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-06(S)	UWBZ	Manganese	8	1670	6420	4268	3859	4435	1865	659.2	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-13(S)	UWBZ	Manganese	8	1770	4410	3279	3113	3280	1057	373.6	-20	0.007	8.083	-2.351	0.00937	Decreasing
MW-10	UWBZ	Manganese	8	19.6	901	221.3	107.8	83.7	303.2	107.2	-12	0.089	8.083	-1.361	0.0868	No Trend

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
W-17(S)	UWBZ	Manganese	9	862	3210	1795	1678	1690	700	233.3	-12	0.13	9.592	-1.147	0.126	No Trend
PS-03	UWBZ	Nickel	8	42.1	177	97.3	85.81	78.5	51.96	18.37	-22	0.002	8.083	-2.598	0.00469	Decreasing
PS-05R	UWBZ	Nickel	8	47.4	172	110.9	99.25	108.4	51.62	18.25	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-06(S)	UWBZ	Nickel	8	66	130	104.4	102	107.5	22.53	7.965	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-13(S)	UWBZ	Nickel	8	27.7	231	116.7	95.69	103.5	69.33	24.51	-24	0.001	8.083	-2.846	0.00222	Decreasing
MW-01	UWBZ	Nitrate+Nitrite	8	0.69	82.2	27.59	6.247	18.36	32.14	11.36	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-03	UWBZ	Nitrate+Nitrite	8	2.3	36.7	19.85	15.28	21.25	11.85	4.188	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-05R	UWBZ	Nitrate+Nitrite	8	2.6	15.6	9.074	7.691	8.715	4.965	1.755	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-06(S)	UWBZ	Nitrate+Nitrite	8	6.2	30.6	19.45	16.61	19.95	10.36	3.662	-22	0.002	8.083	-2.598	0.00469	Decreasing
MW-01	UWBZ	Nitrite-N	8	0.0059	114	27.75	0.416	0.125	50.81	17.96	-24	0.001	8.083	-2.846	0.00222	Decreasing
MW-10	UWBZ	Sulfate	8	120	470	343.8	316.3	374	125.8	44.48	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-03	UWBZ	Sulfate	8	190	3130	979.1	648.6	594	993.9	351.4	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-05R	UWBZ	Sulfate	8	1230	2000	1629	1606	1695	285.6	101	-18	0.016	8.083	-2.103	0.0177	Decreasing
MW-01	UWBZ	Sulfate	8	245	660	432.8	410.3	435	148.6	52.52	2	0.452	8.083	0.124	0.451	No Trend
W-06(S)	UWBZ	Sulfate	8	1400	1850	1656	1647	1660	181.3	64.09	-15	0.054	8.021	-1.745	0.0405	No Trend
W-13(S)	UWBZ	Sulfate	8	2.5	4800	2593	1174	2725	1395	493.3	-10	0.138	8.083	-1.113	0.133	No Trend
W-13(S)	UWBZ	Thallium	8	0.125	11	3.128	1.399	1.7	3.886	1.374	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-13(S)	UWBZ	Vanadium	8	23	167	70.64	53.99	41.6	55.73	19.7	-19	0.016	8.021	-2.244	0.0124	Decreasing
PS-03	UWBZ	Zinc	8	13400	73500	37400	32164	31950	21412	7570	-22	0.002	8.083	-2.598	0.00469	Decreasing
PS-05R	UWBZ	Zinc	8	33900	186000	107925	89845	107450	61450	21726	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-06(S)	UWBZ	Zinc	8	40500	129000	90038	85162	97800	28975	10244	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-13(S)	UWBZ	Zinc	8	1780	16900	9358	7234	9435	5811	2054	-26	0	8.083	-3.093	9.91E-04	Decreasing
W-17(S)	UWBZ	Zinc	9	15600	36400	25044	23803	22700	8430	2810	-26	0.003	9.592	-2.606	0.00457	Decreasing
MW-01	UWBZ	Zinc	8	850	15900	7268	5209	6340	5397	1908	2	0.452	8.083	0.124	0.451	No Trend
MW-23T	TOLA	Lead	8	2.4	11.6	6.075	5.254	5	3.483	1.232	-9	0.119	8.021	-0.997	0.159	No Trend
W-13(D)	BOLA	Manganese	8	243	682	466.1	431.9	486.5	184.2	65.12	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-17(D)	BOLA	Manganese	12	102	500	238	203.4	179.5	144.6	41.74	-44	0.001	14.58	-2.949	0.0016	Decreasing
Western Area																
PS-11	TOLA	Manganese	12	156	485	376.7	363.2	390	90.73	26.19	-6	0.369	14.58	-0.343	0.366	No Trend
PS-01	TOLA	Manganese	8	36.1	211	124.7	107.1	139	64.24	22.71	-5	0.36	8.021	-0.499	0.309	No Trend
W-05(S)	TOLA	Manganese	12	7.9	846	366.4	214.4	396	267.8	77.3	52	0	14.58	3.497	2.35E-04	No Trend
W-05(S)	TOLA	Sulfate	12	48.3	610	278.7	180.6	267.5	218.6	63.09	47	0	14.55	3.162	7.84E-04	Increasing
MW-20B	BOLA	Barium	8	2940	4430	3559	3524	3670	529.8	187.3	-14	0.054	8.083	-1.608	0.0539	No Trend
MW-20B	BOLA	Manganese	8	165	362	261.1	254.9	252.5	60.79	21.49	-18	0.016	8.083	-2.103	0.0177	Decreasing
Lithopone Ridges Area																
PS-13	UWBZ	Ammonia	8	9	247	144.6	107.4	149	78.72	27.83	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-14	UWBZ	Ammonia	8	20.5	69.2	46.3	43.85	46.35	14.78	5.227	-4	0.36	8.083	-0.371	0.355	No Trend
PS-13	UWBZ	Arsenic	8	6.8	34	19.7	16.33	20.85	11.43	4.042	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-16	UWBZ	Cadmium	8	1670	23800	12309	8687	11100	8601	3041	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-15	UWBZ	Cadmium	8	1030	4020	2016	1806	1565	1077	380.8	22	0.002	8.083	2.598	0.00469	Increasing
PS-14	UWBZ	Cadmium	8	3910	22000	13168	11611	10800	6477	2290	-4	0.36	8.083	-0.371	0.355	No Trend
PS-15	UWBZ	Fluoride	8	4.9	9.16	7.101	6.959	7.405	1.46	0.516	-14	0.054	8.083	-1.608	0.0539	No Trend
PS-16	UWBZ	Iron	8	1180	15900	8879	6765	9010	5562	1966	-12	0.089	8.083	-1.361	0.0868	No Trend
PS-16	UWBZ	Lead	8	8.6	280	124.8	81.88	99.05	96.77	34.21	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-14	UWBZ	Lead	8	8	42	22.89	20.41	23	10.98	3.881	-8	0.119	8.083	-0.866	0.193	No Trend
PS-14	UWBZ	Manganese	8	17800	77000	53288	48216	56250	21271	7520	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-16	UWBZ	Manganese	8	486	38500	17866	9786	13450	14615	5167	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-13	UWBZ	Manganese	8	27.7	1880	776.8	502.7	719.5	575.1	203.3	-6	0.274	8.083	-0.619	0.268	No Trend
PS-15	UWBZ	Manganese	8	1560	9630	4906	4021	3915	3117	1102	0	0.548	8.083	N/A	N/A	No Trend
PS-16	UWBZ	Nickel	8	18.8	165	102.2	81.35	104.4	57.05	20.17	-19	0.016	8.021	-2.244	0.0124	Decreasing
PS-14	UWBZ	Nickel	8	42.3	140	98.2	91.65	102	35.02	12.38	-2	0.452	8.083	-0.124	0.451	No Trend
PS-15	UWBZ	Nickel	8	48.9	152	87.01	82.3	82.7	32.14	11.36	-2	0.452	8.083	-0.124	0.451	No Trend
PS-14	UWBZ	Nitrate+Nitrite	8	13.8	56.6	29.3	25.28	25.55	16.65	5.887	16	0.031	8.083	1.856	0.0317	Increasing
PS-15	UWBZ	Nitrate+Nitrite	8	3.74	19.3	8.626	7.719	7.765	4.773	1.688	-2	0.452	8.083	-0.124	0.451	No Trend
PS-13	UWBZ	Sulfate	8	99	2520	1328	912.6	1665	878.4	310.6	-12	0.089	8.083	-1.361	0.0868	No Trend
PS-14	UWBZ	Sulfate	8	1300	3230	2564	2480	2760	620.4	219.4	-8	0.119	8.083	-0.866	0.193	No Trend
PS-15	UWBZ	Sulfate	8	1690	3900	2369	2247	1920	891.1	315.1	-1	0.548	8.021	0	0.5	No Trend
PS-16	UWBZ	Sulfate	8	420	5240	2469	1916	2475	1571	555.4	-12	0.089	8.083	-1.361	0.0868	No Trend

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
PS-16	UWBZ	Zinc	8	46200	1330000	703725	435290	705000	490866	173547	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-15	UWBZ	Zinc	8	186000	471000	272375	257972	233000	101864	36014	16	0.031	8.083	1.856	0.0317	Increasing
PS-14	UWBZ	Zinc	8	98300	1340000	806913	660286	770500	401675	142013	-4	0.36	8.083	-0.371	0.355	No Trend
W-20(I)	TOLA	Ammonia	8	6.5	43.4	14.98	12.53	11.25	11.86	4.193	-12	0.089	8.083	-1.361	0.0868	No Trend
W-20(I)	TOLA	Cadmium	8	1.05	24.7	5.8	3.582	3.35	7.772	2.748	-23	0.002	8.021	-2.743	0.00305	Decreasing
W-20(I)	TOLA	Manganese	8	1100	2990	1803	1709	1760	639.5	226.1	8	0.119	8.083	0.866	0.193	No Trend
W-20(I)	TOLA	Sulfate	8	1150	1700	1428	1412	1470	222.9	78.8	-4	0.36	8.083	-0.371	0.355	No Trend
Slag Pile Area																
W-08(S)	UWBZ	Aluminum	8	866	4840	2987	2519	3040	1646	582.1	-22	0.002	8.083	-2.598	0.00469	Decreasing
HS-01(S)	UWBZ	Arsenic	8	4.8	13.9	8.481	7.956	7.8	3.24	1.145	-12	0.089	8.083	-1.361	0.0868	No Trend
HS-05(S)	UWBZ	Arsenic	8	5	96.4	22.55	13.6	11.3	30.61	10.82	-14	0.054	8.083	-1.608	0.0539	No Trend
W-11(S)	UWBZ	Arsenic	8	5	202	35.68	15.22	12.5	67.44	23.84	-12	0.089	7.958	-1.382	0.0835	No Trend
HS-05(S)	UWBZ	Beryllium	8	2.1	210	31.94	8.914	7.95	72.01	25.46	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-06(S)	UWBZ	Beryllium	8	0.9	5.9	3.788	3.257	4.3	1.83	0.647	-14	0.054	8.083	-1.608	0.0539	No Trend
W-08(S)	UWBZ	Beryllium	8	0.95	4.7	2.613	2.272	2.3	1.403	0.496	-6	0.274	8.083	-0.619	0.268	No Trend
W-09(S)	UWBZ	Beryllium	8	1.4	4.5	2.8	2.541	2.55	1.287	0.455	-11	0.138	8.021	-1.247	0.106	No Trend
W-11(S)	UWBZ	Beryllium	8	3	47.5	29.49	23.67	29.95	14.54	5.139	14	0.054	8.083	1.608	0.0539	No Trend
HS-05(S)	UWBZ	Cadmium	8	4390	34100	13934	11472	11450	9667	3418	-22	0.002	8.083	-2.598	0.00469	Decreasing
HS-06(S)	UWBZ	Cadmium	8	3980	9960	7066	6671	7415	2446	864.8	-28	0	8.083	-3.34	0.0004183	Decreasing
PS-17	UWBZ	Cadmium	8	2730	7620	4966	4593	4685	2033	718.6	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-08(S)	UWBZ	Cadmium	8	2050	9440	5943	5201	5630	3004	1062	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-09(S)	UWBZ	Cadmium	8	820	6860	4076	3262	4005	2452	866.8	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-10(S)	UWBZ	Cadmium	8	523	1920	961.8	881.1	770	469.9	166.1	-26	0	8.083	-3.093	0.0009909	Decreasing
W-11(S)	UWBZ	Cadmium	8	8080	43000	15011	12544	10165	11922	4215	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-08	UWBZ	Cadmium	8	141	307	219.1	209	222.5	70.44	24.9	16	0.031	8.083	1.856	0.0317	Increasing
HS-01(S)	UWBZ	Cadmium	8	235	357	295.8	291.2	296.5	55.23	19.53	-14	0.054	8.083	-1.608	0.0539	No Trend
HS-03(S)	UWBZ	Cadmium	8	1160	5410	3045	2738	3080	1416	500.5	-8	0.119	8.083	-0.866	0.193	No Trend
HS-04(S)	UWBZ	Cadmium	8	721	2090	1454	1375	1465	486.5	172	2	0.452	8.083	0.124	0.451	No Trend
PZ-04(S)R	UWBZ	Cadmium	8	139	2090	742.4	497.1	616.5	668.2	236.2	-10	0.138	8.083	-1.113	0.133	No Trend
HS-04(S)	UWBZ	Cobalt	8	283	1300	726.8	612	704	422.8	149.5	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-05(S)	UWBZ	Cobalt	8	3250	14000	8563	7652	8295	4040	1428	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-06(S)	UWBZ	Cobalt	8	2950	10400	6635	5987	6915	3005	1062	-22	0.002	8.083	-2.598	0.00469	Decreasing
PS-17	UWBZ	Cobalt	8	1770	8800	5168	4343	5105	2959	1046	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-08(S)	UWBZ	Cobalt	8	659	8610	4606	3464	4050	3105	1098	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-09(S)	UWBZ	Cobalt	8	486	9510	4766	3090	4420	3755	1328	-26	0	8.083	-3.093	0.0009909	Decreasing
W-11(S)	UWBZ	Cobalt	8	7280	14300	9973	9725	9295	2450	866	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-03(S)	UWBZ	Cobalt	8	1010	8660	4099	3251	3185	2808	992.9	-14	0.054	8.083	-1.608	0.0539	No Trend
HS-05(S)	UWBZ	Copper	8	114000	281000	198500	187686	207000	67800	23971	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-06(S)	UWBZ	Copper	8	93000	250000	175375	164916	180000	62402	22062	-18	0.016	8.083	-2.103	0.0177	Decreasing
PS-17	UWBZ	Copper	8	58800	181000	120763	110858	113150	51174	18093	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-08(S)	UWBZ	Copper	8	12500	68100	39075	32591	34900	23211	8206	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-09(S)	UWBZ	Copper	8	8010	84300	46726	35671	47450	30351	10731	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-10(S)	UWBZ	Copper	8	1020	4300	2049	1843	1770	1084	383.2	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-11(S)	UWBZ	Copper	8	166000	339000	246375	238226	234500	67777	23963	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-03(S)	UWBZ	Copper	8	12300	82800	44838	38913	37150	23647	8360	-12	0.089	8.083	-1.361	0.0868	No Trend
HS-04(S)	UWBZ	Copper	8	39.3	12900	3776	1106	1460	4834	1709	-8	0.119	8.083	-0.866	0.193	No Trend
HS-01(S)	UWBZ	Fluoride	8	12	20	15.1	14.81	13.85	3.219	1.138	-17	0.031	8.021	-1.995	0.023	Decreasing
HS-05(S)	UWBZ	Fluoride	8	4.5	33.3	15.25	12.7	14.7	9.467	3.347	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-08	UWBZ	Fluoride	8	2.87	5.5	3.853	3.774	3.82	0.855	0.302	11	0.138	8.021	1.247	0.106	No Trend
PS-17	UWBZ	Fluoride	8	2	10	4.716	3.922	3.92	3.023	1.069	-4	0.36	8.083	-0.371	0.355	No Trend
W-08(S)	UWBZ	Fluoride	8	3.5	34	11.72	9.077	9.54	9.934	3.512	-12	0.089	8.083	-1.361	0.0868	No Trend
W-09(S)	UWBZ	Fluoride	8	1.56	5.6	3.239	2.869	2.855	1.667	0.589	-12	0.089	8.083	-1.361	0.0868	No Trend
W-10(S)	UWBZ	Fluoride	8	2.88	12.3	4.824	4.309	3.81	3.079	1.089	-2	0.452	8.083	-0.124	0.451	No Trend
W-11(S)	UWBZ	Fluoride	8	5.44	74	27.63	18.15	13.6	25.75	9.105	4	0.36	8.083	0.371	0.355	No Trend
HS-04(S)	UWBZ	Iron	8	23700	81700	41200	38118	37500	18846	6663	0	0.548	8.083	N/A	N/A	No Trend
HS-05(S)	UWBZ	Iron	8	1400	58000	25513	18181	22200	17057	6031	-6	0.274	8.083	-0.619	0.268	No Trend
HS-06(S)	UWBZ	Iron	8	63	13600	3617	1225	1615	4577	1618	-8	0.119	8.083	-0.866	0.193	No Trend
W-11(S)	UWBZ	Iron	8	2940	251000	131193	77550	144000	91281	32273	12	0.089	8.083	1.361	0.0868	No Trend

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
HS-04(S)	UWBZ	Lead	8	5.5	160	49.29	24.3	28.75	57.79	20.43	-26	0	8.083	-3.093	9.91E-04	Decreasing
HS-05(S)	UWBZ	Lead	8	588	1320	1061	1023	1125	286.4	101.3	-17	0.031	8.021	-1.995	0.023	Decreasing
HS-06(S)	UWBZ	Lead	8	640	1480	1107	1064	1145	318.8	112.7	-21	0.007	8.021	-2.494	0.00632	Decreasing
W-08(S)	UWBZ	Lead	8	429	1270	827.5	786	899	270.5	95.65	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-09(S)	UWBZ	Lead	8	558	2170	1460	1342	1460	577.3	204.1	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-03(S)	UWBZ	Lead	8	1320	3520	2323	2217	2325	746.9	264.1	4	0.36	8.083	0.371	0.355	No Trend
PS-17	UWBZ	Lead	8	500	1550	1080	1014	1105	376.9	133.2	-12	0.089	8.083	-1.361	0.0868	No Trend
PZ-04(S)R	UWBZ	Lead	8	35.3	194	76.44	64.24	50.25	54.27	19.19	2	0.452	8.083	0.124	0.451	No Trend
W-10(S)	UWBZ	Lead	8	4.65	79.3	33.82	22.56	32.1	27.03	9.558	-6	0.274	8.083	-0.619	0.268	No Trend
W-11(S)	UWBZ	Lead	8	446	2090	1285	1181	1230	506.8	179.2	-12	0.089	8.083	-1.361	0.0868	No Trend
HS-01(S)	UWBZ	Manganese	8	1470	3900	2643	2435	2800	1082	382.5	-22	0.002	8.083	-2.598	0.00469	Decreasing
HS-04(S)	UWBZ	Manganese	8	21200	81000	45213	39560	31800	25159	8895	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-05(S)	UWBZ	Manganese	8	127000	763000	465875	405618	475000	228417	80758	-26	0	8.083	-3.093	9.91E-04	Decreasing
HS-06(S)	UWBZ	Manganese	8	124000	516000	337625	291401	379500	174837	61814	-21	0.007	8.021	-2.494	0.00632	Decreasing
PS-17	UWBZ	Manganese	8	71900	462000	260638	211302	275000	158418	56009	-24	0.001	8.083	-2.846	0.00222	Decreasing
PZ-04(S)R	UWBZ	Manganese	8	2110	21300	10474	7257	5965	8780	3104	-16	0.031	8.083	-1.856	0.0317	Decreasing
W-08(S)	UWBZ	Manganese	8	25600	462000	238825	172689	189000	170682	60345	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-09(S)	UWBZ	Manganese	8	19600	429000	224188	143399	214500	173045	61181	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-10(S)	UWBZ	Manganese	8	3500	39000	12614	8918	8790	12118	4284	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-11(S)	UWBZ	Manganese	8	7.5	979000	561626	151106	573000	280361	99123	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-03(S)	UWBZ	Manganese	8	49800	468000	210138	164668	162000	148633	52550	-14	0.054	8.083	-1.608	0.0539	No Trend
PS-08	UWBZ	Manganese	8	197	561	414.9	395.1	452	124.7	44.08	-6	0.274	8.083	-0.619	0.268	No Trend
HS-04(S)	UWBZ	Nickel	8	293	900	510.3	465.4	440	237.5	83.97	-22	0.002	8.083	-2.598	0.00469	Decreasing
HS-05(S)	UWBZ	Nickel	8	1600	6050	3936	3518	3965	1858	656.8	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-06(S)	UWBZ	Nickel	8	1430	4750	3015	2727	3065	1368	483.6	-24	0.001	8.083	-2.846	0.00222	Decreasing
PS-17	UWBZ	Nickel	8	1050	5740	3371	2819	3250	1954	690.7	-26	0	8.083	-3.093	9.91E-04	Decreasing
W-08(S)	UWBZ	Nickel	8	525	4370	2256	1717	1825	1603	566.8	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-09(S)	UWBZ	Nickel	8	1080	16100	7454	5338	7115	5431	1920	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-10(S)	UWBZ	Nickel	8	181	598	314.9	291	272	143.8	50.85	-22	0.002	8.083	-2.598	0.00469	Decreasing
HS-01(S)	UWBZ	Nickel	8	75.2	120	98.61	97.15	98.85	18.02	6.372	-15	0.054	8.021	-1.745	0.0405	No Trend
HS-03(S)	UWBZ	Nickel	8	1290	8660	4583	3905	3640	2616	925	-14	0.054	8.083	-1.608	0.0539	No Trend
PZ-04(S)R	UWBZ	Nickel	8	68.6	1160	425.5	263.4	336.5	393.9	139.3	-14	0.054	8.083	-1.608	0.0539	No Trend
W-11(S)	UWBZ	Nickel	8	3360	6030	4508	4435	4375	873	308.6	-13	0.089	8.021	-1.496	0.0673	No Trend
HS-01(S)	UWBZ	Nitrate+Nitrite	8	2.92	21	9.109	7.899	8.485	5.394	1.907	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-17	UWBZ	Nitrate+Nitrite	8	8	22.2	15.71	14.79	17.15	5.201	1.839	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-08(S)	UWBZ	Nitrate+Nitrite	8	12	25.2	19.15	18.38	20.65	5.604	1.981	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-06(S)	UWBZ	Nitrate+Nitrite	8	1.87	12.1	6.534	4.733	6.15	4.838	1.711	-15	0.054	8.021	-1.745	0.0405	No Trend
HS-03(S)	UWBZ	Nitrite-N	8	0.01	12	2.926	0.184	0.125	5.27	1.863	-25	0.001	8.021	-2.992	0.00138	Decreasing
HS-05(S)	UWBZ	Nitrite-N	8	0.0075	7.9	1.713	0.14	0.125	3.099	1.096	-27	0	8.021	-3.242	5.94E-04	Decreasing
HS-06(S)	UWBZ	Nitrite-N	8	0.0061	12	2.681	0.136	0.05	4.919	1.739	-27	0	8.021	-3.242	5.94E-04	Decreasing
HS-06(S)	UWBZ	Selenium	8	5	171	75.01	38.48	52.1	71.5	25.28	-16	0.031	8.083	-1.856	0.0317	Decreasing
PS-17	UWBZ	Selenium	8	3.7	117	54.49	29.11	36.85	49.92	17.65	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-08(S)	UWBZ	Selenium	8	15.8	174	59.43	40.06	31.5	57.13	20.2	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-03(S)	UWBZ	Selenium	8	1.15	108	48.9	21.39	43.1	43.46	15.37	-6	0.274	8.083	-0.619	0.268	No Trend
HS-05(S)	UWBZ	Selenium	8	8.75	245	98.69	58.4	64.15	91.83	32.47	-8	0.119	8.083	-0.866	0.193	No Trend
W-09(S)	UWBZ	Selenium	8	4.75	137	47.23	31.57	37.9	43.5	15.38	-13	0.089	8.021	-1.496	0.0673	No Trend
W-11(S)	UWBZ	Selenium	8	11	201	87.6	61.61	89.15	65.19	23.05	6	0.274	8.083	0.619	0.268	No Trend
W-11(S)	UWBZ	Silver	8	1.8	57.8	24.74	12.77	16.55	23.23	8.214	11	0.138	8.021	1.247	0.106	No Trend
HS-05(S)	UWBZ	Sulfate	8	4600	18600	12414	11231	12400	5401	1910	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-06(S)	UWBZ	Sulfate	8	4800	15900	9670	8897	9695	4069	1439	-22	0.002	8.083	-2.598	0.00469	Decreasing
PS-17	UWBZ	Sulfate	8	4800	12100	8424	7989	8000	2855	1010	-16	0.031	8.083	-1.856	0.0317	Decreasing
W-08(S)	UWBZ	Sulfate	8	1600	11700	6789	5645	5850	3901	1379	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-09(S)	UWBZ	Sulfate	8	1900	15800	8151	6817	7800	4649	1644	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-01(S)	UWBZ	Sulfate	8	823	1210	1017	1007	1017	151.1	53.42	-8	0.119	8.083	-0.866	0.193	No Trend
HS-03(S)	UWBZ	Sulfate	8	1800	21000	7998	6279	6790	6091	2153	-10	0.138	8.083	-1.113	0.133	No Trend
HS-04(S)	UWBZ	Sulfate	8	1930	8400	3455	3074	3055	2111	746.4	-14	0.054	8.083	-1.608	0.0539	No Trend
PS-08	UWBZ	Sulfate	8	640	970	814.6	805.7	810	128.5	45.44	8	0.119	8.083	0.866	0.193	No Trend
PZ-04(S)R	UWBZ	Sulfate	8	370	2900	1223	1001	1090	829.9	293.4	-12	0.089	8.083	-1.361	0.0868	No Trend

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
W-10(S)	UWBZ	Sulfate	8	1000	25500	4763	2408	1815	8398	2969	-14	0.054	8.083	-1.608	0.0539	No Trend
W-11(S)	UWBZ	Sulfate	8	11100	28000	18000	17141	15900	6207	2194	-4	0.36	8.083	-0.371	0.355	No Trend
W-08(S)	UWBZ	Thallium	8	1.3	299	91.47	12.24	3.65	129.6	45.81	-19	0.016	8.021	-2.244	0.0124	Decreasing
W-09(S)	UWBZ	Thallium	8	0.155	299	116.5	8.896	55.9	136.6	48.29	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-01(S)	UWBZ	Zinc	8	36300	79000	68450	66614	75350	14911	5272	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-04(S)	UWBZ	Zinc	8	404000	1100000	657000	619722	546000	253641	89676	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-05(S)	UWBZ	Zinc	8	1980000	7870000	5245000	4767222	5400000	2225983	787004	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-06(S)	UWBZ	Zinc	8	495000	6250000	3981875	3140970	4565000	2189814	774216	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-17	UWBZ	Zinc	8	1070000	5910000	3202500	2687381	3210000	1863075	658697	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-08(S)	UWBZ	Zinc	8	621000	4610000	2534375	1967721	2225000	1689510	597332	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-09(S)	UWBZ	Zinc	8	203000	5730000	3155000	2058539	3360000	2180926	771074	-22	0.002	8.083	-2.598	0.00469	Decreasing
W-10(S)	UWBZ	Zinc	8	270000	993000	478125	443077	403500	218172	77135	-24	0.001	8.083	-2.846	0.00222	Decreasing
W-11(S)	UWBZ	Zinc	8	4550000	9950000	6576250	6370276	5960000	1829223	646728	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-03(S)	UWBZ	Zinc	8	799000	4770000	2609875	2256441	2390000	1394992	493204	-12	0.089	8.083	-1.361	0.0868	No Trend
PZ-04(S)R	UWBZ	Zinc	8	46700	387000	188425	141401	116100	143830	50851	-12	0.089	8.083	-1.361	0.0868	No Trend
HS-07(I)	TOLA	Ammonia	8	13.3	58.6	28.56	26.32	25.35	13.45	4.756	6	0.274	8.083	0.619	0.268	No Trend
W-11(I)	TOLA	Ammonia	8	3.77	48.3	25.11	20.11	24.15	14.36	5.078	-6	0.274	8.083	-0.619	0.268	No Trend
HS-07(I)	TOLA	Arsenic	8	8.3	22	14.26	13.72	13.75	4.228	1.495	-10	0.138	8.083	-1.113	0.133	No Trend
PS-07	TOLA	Cadmium	8	226	403	309.8	301.5	316.5	75.54	26.71	-20	0.007	8.083	-2.351	0.00937	Decreasing
PZ-04(I)R	TOLA	Cadmium	8	14.55	136	66.67	47.39	54.3	51.4	18.17	12	0.089	8.083	1.361	0.0868	No Trend
PS-07	TOLA	Fluoride	8	11	36.7	16.7	15.35	12.55	8.631	3.051	-13	0.089	8.021	-1.496	0.0673	No Trend
PZ-04(I)R	TOLA	Iron	8	1330	13800	5655	3865	4215	4796	1696	-22	0.002	8.083	-2.598	0.00469	Decreasing
HS-07(I)	TOLA	Iron	8	63	9100	6800	4225	7700	2879	1018	-12	0.089	8.083	-1.361	0.0868	No Trend
W-11(I)	TOLA	Iron	8	9880	18000	13029	12709	12350	3138	1109	-14	0.054	8.083	-1.608	0.0539	No Trend
W-11(I)	TOLA	Lead	8	0.65	27.4	7.219	4.054	4.75	8.694	3.074	-4	0.36	8.083	-0.371	0.355	No Trend
PS-07	TOLA	Manganese	8	1910	4530	3033	2871	2950	1055	372.9	-20	0.007	8.083	-2.351	0.00937	Decreasing
W-11(I)	TOLA	Manganese	8	377	655	484.6	477.2	477.5	93.11	32.92	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-02(I)	TOLA	Manganese	8	258	138000	17709	1010	636.5	48605	17185	-10	0.138	8.083	-1.113	0.133	No Trend
HS-07(I)	TOLA	Manganese	8	545	630	589.5	588.7	595.5	32.2	11.38	10	0.138	8.083	1.133	0.133	No Trend
PZ-04(I)R	TOLA	Manganese	8	4210	8890	6044	5876	5675	1600	565.6	6	0.274	8.083	0.619	0.268	No Trend
PS-07	TOLA	Nickel	8	87.7	144	111.7	109.7	112.5	22.7	8.027	-21	0.007	8.021	-2.494	0.00632	Decreasing
PZ-04(I)R	TOLA	Nickel	8	190	245	213.5	212.9	213.5	16.84	5.952	-2	0.452	8.083	-0.124	0.451	No Trend
HS-02(I)	TOLA	Nitrate+Nitrite	8	3.4	15.1	8.193	6.771	5.815	5.267	1.862	-20	0.007	8.083	-2.351	0.00937	Decreasing
PS-07	TOLA	Nitrate+Nitrite	8	1.7	21.1	9.208	6.432	10.05	6.918	2.446	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-07(I)	TOLA	Sulfate	8	540	990	819	801.9	884.5	170.6	60.32	-17	0.031	8.021	-1.995	0.023	Decreasing
PS-07	TOLA	Sulfate	8	840	1270	1068	1059	1105	141.2	49.92	-17	0.031	8.021	-1.995	0.023	Decreasing
W-11(I)	TOLA	Sulfate	8	317	636	490.3	475.8	514.5	122.6	43.35	-17	0.031	8.021	-1.995	0.023	Decreasing
HS-02(I)	TOLA	Sulfate	8	230	688	564	537.4	645	154.6	54.67	-15	0.054	8.021	-1.745	0.0405	No Trend
PZ-04(I)R	TOLA	Sulfate	8	649	1500	1146	1105	1200	307.7	108.8	15	0.054	8.021	1.745	0.0405	No Trend
PS-07	TOLA	Zinc	8	36900	96800	78363	75472	86300	19742	6980	-20	0.007	8.083	-2.351	0.00937	Decreasing
PZ-04(I)R	TOLA	Zinc	8	16100	117000	53913	40592	41250	40404	14285	10	0.138	8.083	1.113	0.133	No Trend
MW-42B	BOLA	Iron	8	1180	12500	3398	2297	1580	3962	1401	-12	0.089	8.083	-1.361	0.0868	No Trend
MW-42B	BOLA	Manganese	8	464	806	610.8	603.3	586.5	104	36.76	-20	0.007	8.083	-2.351	0.00937	Decreasing
Vanadium Pentoxide Catalyst Disposal Area																
W-22(S)	TOLA	Ammonia	12	5.18	178	38.41	24.2	29.5	46.5	13.42	16	0.155	14.58	1.029	0.152	No Trend
W-22(S)	TOLA	Cadmium	12	0.06	279	24.58	1.594	1.425	80.13	23.13	12	0.23	14.28	0.77	0.221	No Trend
W-22(S)	TOLA	Manganese	12	833	2720	1727	1618	1790	597.9	172.6	-53	0	14.55	-3.574	1.76E-04	Decreasing
W-22(S)	TOLA	Sulfate	12	0.5	910	591.2	321.6	733.5	305.1	88.06	-30	0.022	14.58	-1.989	0.0234	Decreasing
W-22(S)	TOLA	Zinc	12	9	65400	5515	71.94	29.85	18859	5444	-32	0.016	14.58	-2.126	0.0168	Decreasing
MW-40B	BOLA	Ammonia	8	62	204	147.1	138.1	155	49.62	17.54	3	0.452	8.021	0.249	0.402	No Trend
MW-40B	BOLA	Iron	8	7900	20100	12268	11535	9435	4774	1688	-16	0.031	8.083	-1.856	0.0317	Decreasing
MW-40B	BOLA	Manganese	8	52.9	415	211.1	156.9	184.5	153.1	54.13	-18	0.016	8.083	-2.103	0.0177	Decreasing
MW-40B	BOLA	Sulfate	8	400	1900	1535	1413	1700	475.4	168.1	9	0.119	8.021	0.997	0.159	No Trend
Upland Portion of the Southeast Area																
HS-08(S)	UWBZ	Arsenic	8	5	47	13.88	10.57	9.9	13.76	4.866	-6	0.274	8.083	-0.619	0.268	No Trend
HS-09(S)	UWBZ	Arsenic	8	23	45.8	32.45	31.52	28.7	8.543	3.02	6	0.274	8.083	0.619	0.268	No Trend
HS-11(S)	UWBZ	Arsenic	8	3.8	19.9	13.48	12.37	13.65	4.697	1.661	2	0.452	8.083	0.124	0.451	No Trend
HS-12(S)	UWBZ	Arsenic	8	4.05	23.6	13.14	11.33	12.35	6.794	2.402	-12	0.089	8.083	-1.361	0.0868	No Trend

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
W-19(S)	UWBZ	Arsenic	8	5	17.4	12.09	10.91	13.85	5.155	1.823	-10	0.138	8.083	-1.113	0.133	No Trend
HS-08(S)	UWBZ	Beryllium	8	2.5	8.3	4.819	4.438	4.45	2.07	0.732	-10	0.138	8.083	-1.113	0.133	No Trend
HS-08(S)	UWBZ	Cadmium	8	2520	5880	4230	4078	4270	1165	411.7	-14	0.054	8.083	-1.608	0.0539	No Trend
HS-09(S)	UWBZ	Cadmium	8	6.9	73	33.58	27.74	28.4	20.42	7.219	-2	0.452	8.083	-0.124	0.451	No Trend
HS-11(S)	UWBZ	Cadmium	8	2.4	73.1	21	10.27	9.1	26.6	9.403	8	0.119	8.083	0.866	0.193	No Trend
HS-08(S)	UWBZ	Cobalt	8	1990	7520	5203	4639	5555	2421	856.1	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-09(S)	UWBZ	Cobalt	8	1300	2740	1920	1850	2000	549	194.1	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-08(S)	UWBZ	Copper	8	12800	48100	22425	20043	16050	12423	4392	10	0.138	8.083	1.113	0.133	No Trend
HS-08(S)	UWBZ	Fluoride	8	1.95	8.7	5.576	5.105	5.6	2.228	0.788	-26	0	8.083	-3.093	9.91E-04	Decreasing
HS-08(S)	UWBZ	Iron	8	63	9780	5144	2303	5805	4227	1495	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-09(S)	UWBZ	Iron	8	125000	342000	239750	220061	237000	101167	35768	-23	0.002	8.021	-2.743	0.00305	Decreasing
HS-11(S)	UWBZ	Iron	8	15600	25800	21250	20880	21900	4140	1464	-14	0.054	8.083	-1.608	0.0539	No Trend
W-18(S)	UWBZ	Iron	8	2060	16500	10775	8964	12150	5232	1850	-2	0.452	8.083	-0.124	0.451	No Trend
W-19(S)	UWBZ	Iron	8	7720	10900	9710	9653	9870	1095	387.1	-8	0.119	8.083	-0.866	0.193	No Trend
HS-08(S)	UWBZ	Lead	8	168	1130	611	523.6	643.5	319.2	112.9	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-09(S)	UWBZ	Lead	8	0.5	21.6	8.163	4.506	7.45	7.014	2.48	-6	0.274	7.958	-0.628	0.265	No Trend
HS-08(S)	UWBZ	Manganese	8	101000	421000	286125	249865	315000	143004	50560	-24	0.001	8.083	-2.846	0.00222	Decreasing
HS-09(S)	UWBZ	Manganese	8	83500	208000	144013	134257	141000	55639	19671	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-11(S)	UWBZ	Manganese	8	3100	6420	4940	4761	5215	1370	484.4	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-18(S)	UWBZ	Manganese	8	183	558	391.3	369.5	408	127.7	45.14	-18	0.016	8.083	-2.103	0.0177	Decreasing
W-19(S)	UWBZ	Manganese	8	5540	8220	6923	6855	6975	1028	363.5	-19	0.016	8.021	-2.244	0.0124	Decreasing
HS-12(S)	UWBZ	Manganese	8	1750	2500	2208	2191	2305	281.2	99.42	-14	0.054	8.083	-1.608	0.0539	No Trend
HS-08(S)	UWBZ	Nickel	8	1500	6360	4236	3692	4600	2141	756.9	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-09(S)	UWBZ	Nickel	8	445	1190	793.9	757.7	843.5	249	88.04	-18	0.016	8.083	-2.103	0.0177	Decreasing
HS-08(S)	UWBZ	Nitrite-N	8	0.0061	9.6	2.233	0.148	0.125	4.013	1.419	-25	0.001	8.021	-2.992	0.00138	Decreasing
HS-08(S)	UWBZ	Selenium	8	8.3	141	75.29	52.07	82.15	53.8	19.02	-20	0.007	8.083	-2.351	0.00937	Decreasing
HS-09(S)	UWBZ	Selenium	8	3.4	59.6	37.8	29.4	41.5	19.38	6.851	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-09(S)	UWBZ	Sulfate	8	2200	4380	3585	3486	3970	850.1	300.5	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-08(S)	UWBZ	Sulfate	8	5880	11200	8914	8673	9400	2137	755.4	-10	0.138	8.083	-1.113	0.133	No Trend
HS-11(S)	UWBZ	Sulfate	8	1400	1800	1673	1667	1725	145.9	51.57	-5	0.36	8.021	-0.499	0.309	No Trend
HS-12(S)	UWBZ	Sulfate	8	330	560	445.9	440.1	455	75.28	26.62	-4	0.36	8.083	-0.371	0.355	No Trend
W-19(S)	UWBZ	Sulfate	8	1200	1510	1361	1358	1370	99.78	35.28	-14	0.054	8.083	-1.608	0.0539	No Trend
W-19(S)	UWBZ	Zinc	8	4950	9800	8058	7885	8460	1656	585.4	20	0.007	8.083	2.351	0.00937	Increasing
HS-08(S)	UWBZ	Zinc	8	1180000	4650000	3096250	2703004	3290000	1570550	555273	-12	0.089	8.083	-1.361	0.0868	No Trend
HS-09(S)	UWBZ	Zinc	8	92400	614000	409550	365176	444500	160808	56854	-14	0.054	8.083	-1.608	0.0539	No Trend
HS-11(S)	UWBZ	Zinc	8	24900	66200	38800	36350	31350	15718	5557	11	0.138	8.021	1.247	0.106	No Trend
HS-13(I)	TOLA	Ammonia	8	23	144	88.01	76.84	90	42.61	15.07	12	0.089	8.083	1.361	0.0868	No Trend
MW-26T	TOLA	Ammonia	8	76	160	124	120.9	125	28.27	9.995	6	0.274	7.958	0.628	0.265	No Trend
MW-27T	TOLA	Ammonia	8	5.16	230	60.06	36.59	34	72.36	25.58	-5	0.36	8.021	-0.499	0.309	No Trend
HS-13(I)	TOLA	Iron	8	20900	30200	25650	25463	25650	3294	1165	25	0.001	8.021	2.992	0.00138	Increasing
MW-27T	TOLA	Iron	8	1030	12900	5134	4278	4455	3380	1195	18	0.016	8.083	2.103	0.0177	Increasing
MW-26T	TOLA	Iron	8	23400	28600	26275	26217	25700	1867	660	-1	0.548	8.021	0	0.5	No Trend
MW-26T	TOLA	Manganese	8	531	869	689.4	680.2	703.5	119.9	42.38	-16	0.031	8.083	-1.856	0.0317	Decreasing
HS-13(I)	TOLA	Manganese	8	920	1120	1033	1031	1060	74.29	26.26	-3	0.452	8.021	-0.249	0.402	No Trend
MW-27T	TOLA	Manganese	8	170	1210	991.9	869.4	1155	363.1	128.4	-3	0.452	8.021	-0.249	0.402	No Trend
HS-13(I)	TOLA	Sulfate	8	850	1480	1170	1146	1155	252.5	89.28	20	0.007	8.083	2.351	0.00937	Increasing
MW-26T	TOLA	Sulfate	8	0.5	1400	1042	447.3	1150	448.6	158.6	9	0.119	7.895	1.013	0.155	No Trend
MW-27T	TOLA	Sulfate	8	364	2000	633.6	527.9	455	553.6	195.7	4	0.36	8.083	0.371	0.355	No Trend
W-18(D)	BOLA	Ammonia	12	1.5	76.4	46.34	35.46	43.8	22.56	6.514	-38	0.004	14.58	-2.537	0.00559	Decreasing
MW-26B	BOLA	Ammonia	8	32	330	198.6	166.5	218.5	93.45	33.04	-4	0.36	8.083	-0.371	0.355	No Trend
W-19(D)	BOLA	Ammonia	8	39.3	201	104.2	88.48	89.55	61.84	21.86	12	0.089	8.083	1.361	0.0868	No Trend
MW-26B	BOLA	Arsenic	8	0.81	28.9	7.039	4.301	5	9.001	3.182	-2	0.452	6.976	-0.143	0.443	No Trend
W-18(D)	BOLA	Iron	12	50	6540	4673	3400	4510	1792	517.3	-27	0.043	14.55	-1.787	0.037	Decreasing
W-19(D)	BOLA	Iron	8	18600	36300	28550	27614	30250	7519	2658	-22	0.002	8.083	-2.598	0.00469	Decreasing
MW-26B	BOLA	Iron	8	3740	19900	14243	13075	14800	4663	1648	-5	0.36	8.021	-0.499	0.309	No Trend
W-18(D)	BOLA	Manganese	12	114	1820	1153	980.2	1065	501	144.6	-44	0.001	14.58	-2.949	0.0016	Decreasing
W-19(D)	BOLA	Manganese	8	355	669	532.4	520.4	575	115.5	40.83	-16	0.031	8.083	-1.856	0.0317	Decreasing

TABLE 1

Appendix U - Mann-Kendall Trend Results
Phase II Remedial Investigation
OU3: On-Site Soils and Groundwater
DePue Site

Well Information			General Statistics								Mann-Kendall Test					
Location	Aquifer	Contaminant	Number of Events	Minimum	Maximum	Mean	Geometric Mean	Median	Standard Deviation	SEM	Test Value (S)	Tabulated p-value	Standard Deviation of S	Standardized Value of S	Approximate p-value	Trend
MW-26B	BOLA	Manganese	8	201	848	317.9	281.7	237.5	216	76.35	-6	0.274	8.083	-0.619	0.268	No Trend
W-18(D)	BOLA	Sulfate	12	230	940	577.4	543.8	505	200.3	57.82	-30	0.022	14.51	-1.998	0.0229	Decreasing
W-19(D)	BOLA	Sulfate	8	1080	1600	1234	1222	1150	185.9	65.71	19	0.016	8.021	2.244	0.0124	Increasing
MW-26B	BOLA	Sulfate	8	430	2300	1980	1794	2200	631.1	223.1	6	0.274	7.958	0.628	0.265	No Trend

Notes:

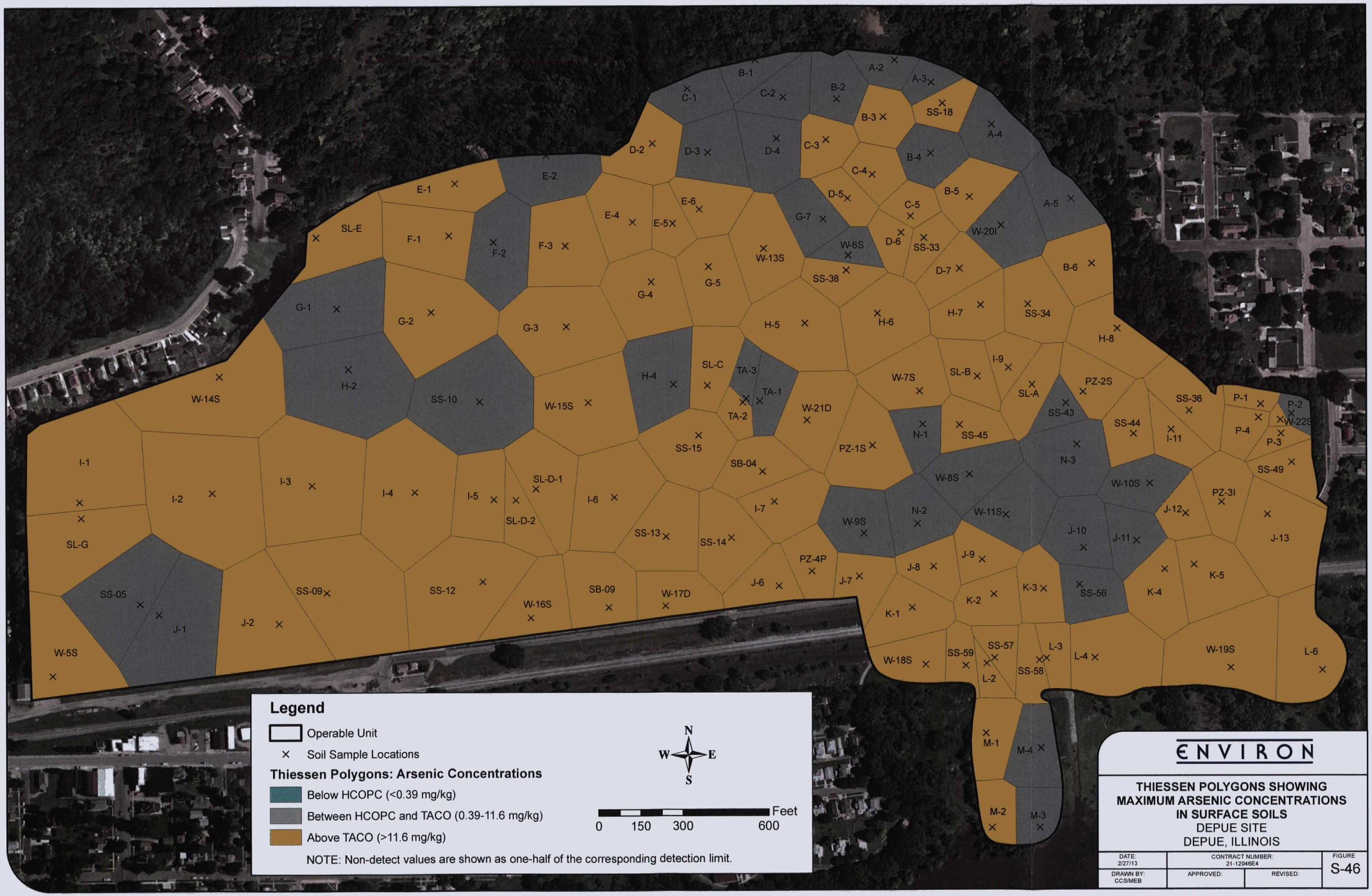
SEM: Standard Error of the Mean

ATTACHMENT 8

ATTACHMENT 8

Attachment 8

Polygon Maps



ENVIRON

THIESSEN POLYGONS SHOWING MAXIMUM ARSENIC CONCENTRATIONS IN SURFACE SOILS

DEPUE SITE

DEPUE, ILLINOIS

DATE: 2/27/13	CONTRACT NUMBER: 21-12046E4		FIGURE S-46
DRAWN BY: CCS/MEB	APPROVED:	REVISED:	

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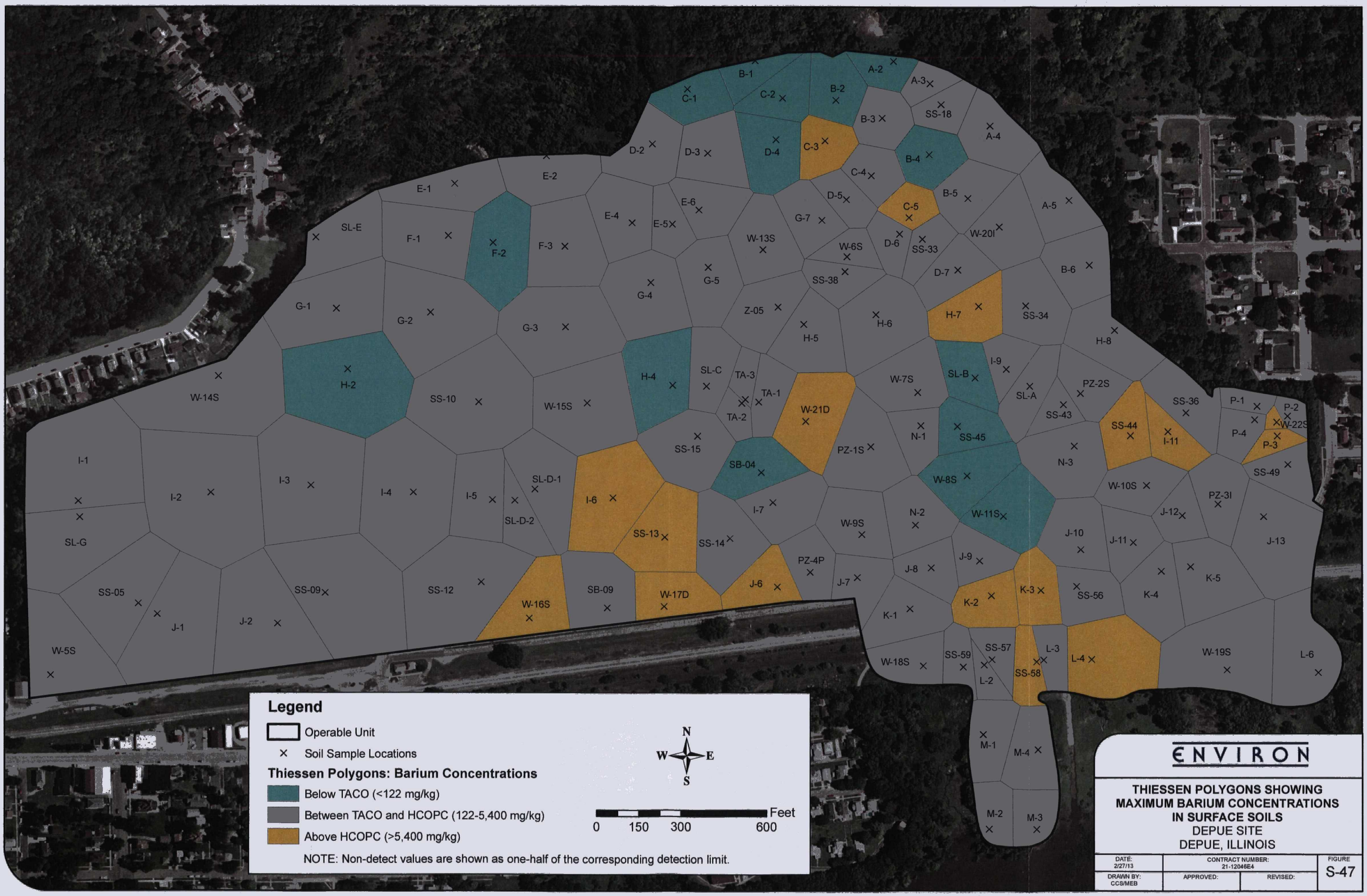


Legend

Operable Unit

× Soil Sample Locations

Thiessen Polygons: Barium Concentrations

- Below TACO (<122 mg/kg)
- Between TACO and HCOPC (122-5,400 mg/kg)
- Above HCOPC (>5,400 mg/kg)

NOTE: Non-detect values are shown as one-half of the corresponding detection limit.

N W E S

0 150 300 600 Feet

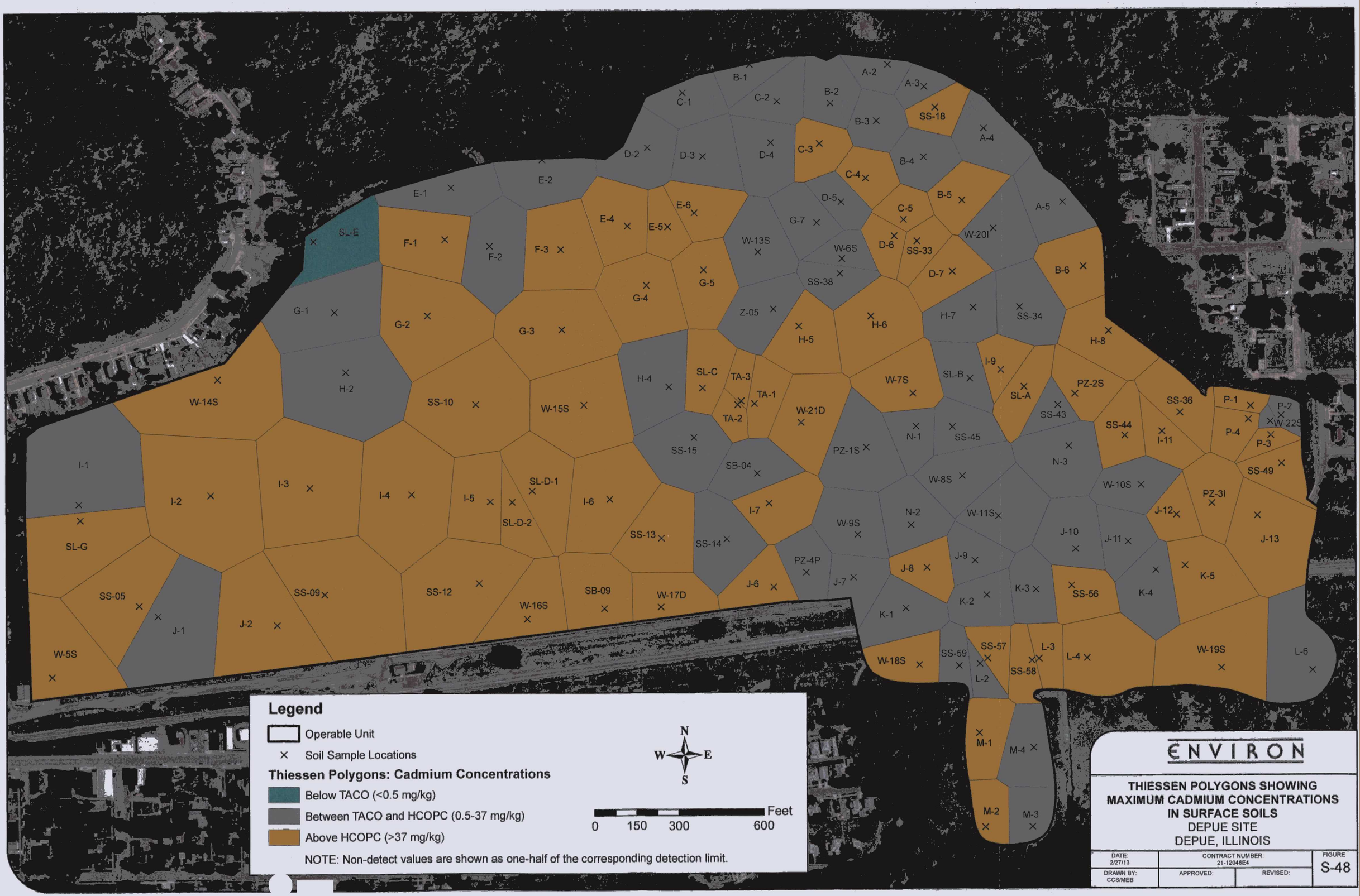
ENVIRON

THIESSEN POLYGONS SHOWING MAXIMUM BARIUM CONCENTRATIONS IN SURFACE SOILS

DEPUE SITE

DEPUE, ILLINOIS

DATE: 2/27/13	CONTRACT NUMBER: 21-12046E4		FIGURE S-47
DRAWN BY: CCS/MEB	APPROVED:	REVISED:	


B-1
A-2
A-3
C-1
C-2
B-2
B-3
SS-18
A-4
D-2
D-3
D-4
C-3
B-4
C-4
E-1
E-2
D-5
B-5
A-5
SL-E
F-1
F-2
F-3
E-4
E-5
E-6
G-7
C-5
W-13S
W-6S
D-6
SS-33
W-20I
G-5
G-4
SS-38
D-7
B-6
G-1
G-2
G-3
Z-05
H-6
H-7
SS-34
H-5
H-8
W-14S
H-2
SS-10
W-15S
H-4
SL-C
TA-3
TA-1
TA-2
W-21D
W-7S
SL-B
I-9
SL-A
PZ-2S
SS-36
P-1
P-2
W-22S
SS-43
SS-44
I-11
P-4
P-3
SS-15
N-1
SS-45
PZ-1S
N-3
SB-04
W-8S
W-10S
SS-49
I-1
I-2
I-3
I-4
I-5
SL-D-1
I-6
I-7
W-9S
N-2
W-11S
PZ-3I
J-12
J-13
SL-D-2
SS-13
SS-14
J-10
J-11
SL-G
PZ-4P
J-8
J-9
K-5
SS-05
SS-09
SS-12
SB-09
W-17D
J-6
J-7
K-3
SS-56
K-4
K-2
K-1
J-1
J-2
W-16S
W-5S
W-18S
SS-59
SS-57
L-3
L-4
W-19S
L-6
SS-58
L-2
M-1
M-4
M-2
M-3
Legend
Operable Unit
Soil Sample Locations
Thiessen Polygons: Cadmium Concentrations
Below TACO (<0.5 mg/kg)
Between TACO and HCOPC (0.5-37 mg/kg)
Above HCOPC (>37 mg/kg)
NOTE: Non-detect values are shown as one-half of the corresponding detection limit.
N
W
E
S
0
150
300
600
Feet
ENVIRON
THIESSEN POLYGONS SHOWING
MAXIMUM CADMIUM CONCENTRATIONS
IN SURFACE SOILS
DEPUE SITE
DEPUE, ILLINOIS
DATE: 2/27/13
CONTRACT NUMBER: 21-12046E4
FIGURE S-48
DRAWN BY: CCS/MEB
APPROVED:
REVISED:
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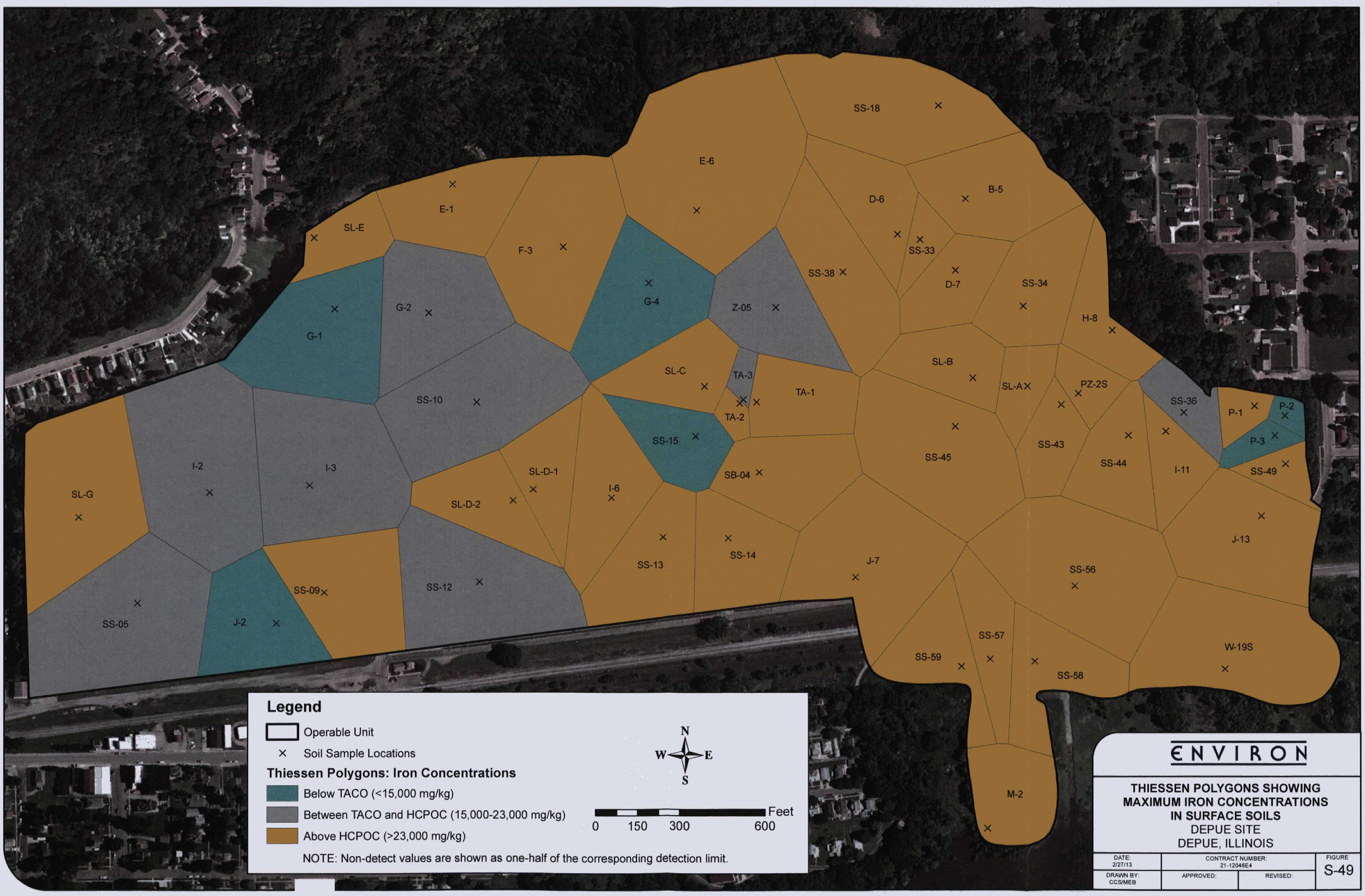

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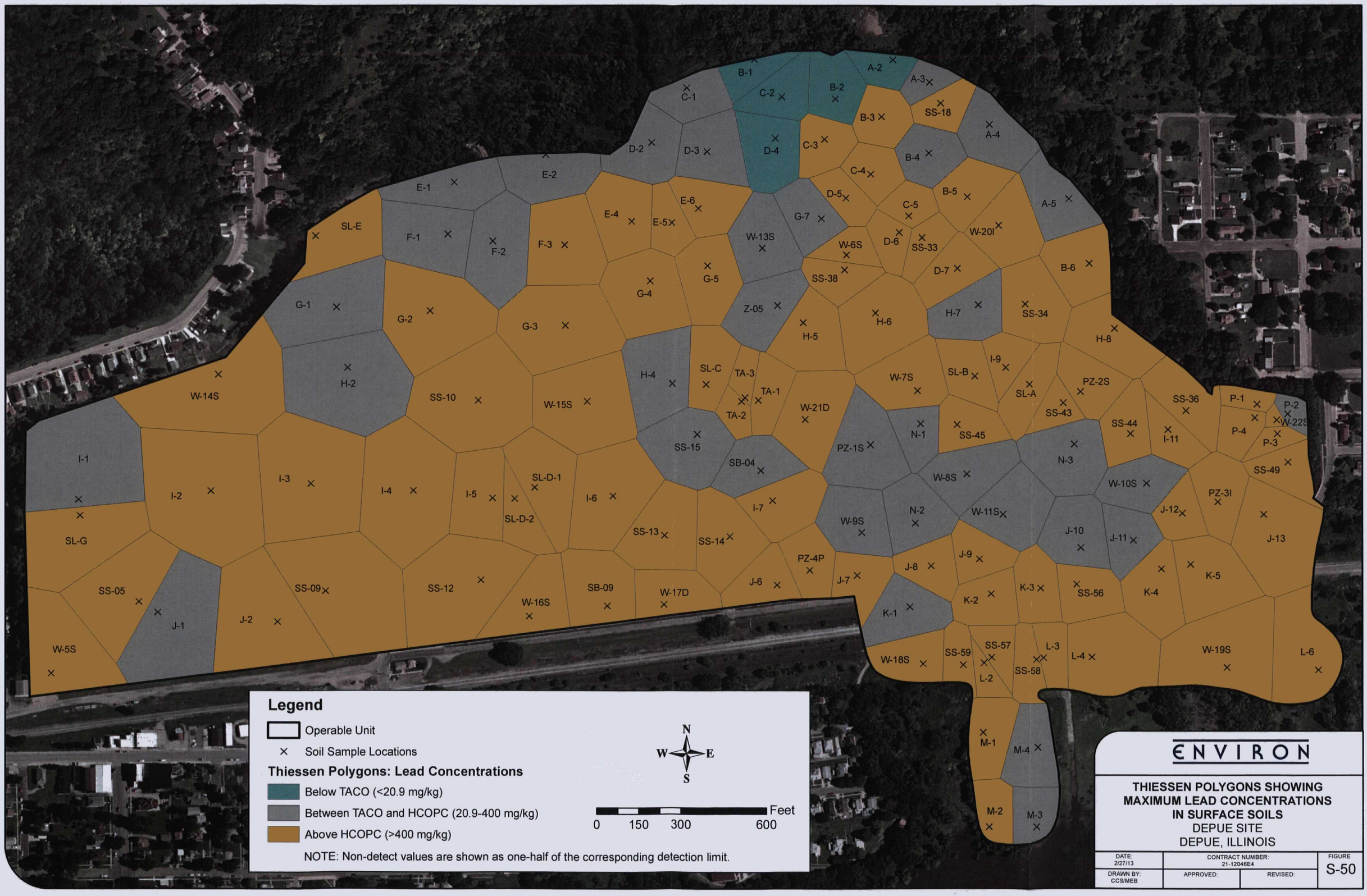

Legend

Operable Unit

× Soil Sample Locations

Thiessen Polygons: Lead Concentrations

- Below TACO (<20.9 mg/kg)
- Between TACO and HCOPC (20.9-400 mg/kg)
- Above HCOPC (>400 mg/kg)

NOTE: Non-detect values are shown as one-half of the corresponding detection limit.

N W E S

0 150 300 600 Feet

ENVIRON

THIESSEN POLYGONS SHOWING MAXIMUM LEAD CONCENTRATIONS IN SURFACE SOILS

DEPUE SITE

DEPUE, ILLINOIS

DATE: 2/27/13	CONTRACT NUMBER: 21-12046E4		FIGURE S-50
DRAWN BY: CCS/MEB	APPROVED:	REVISED:	

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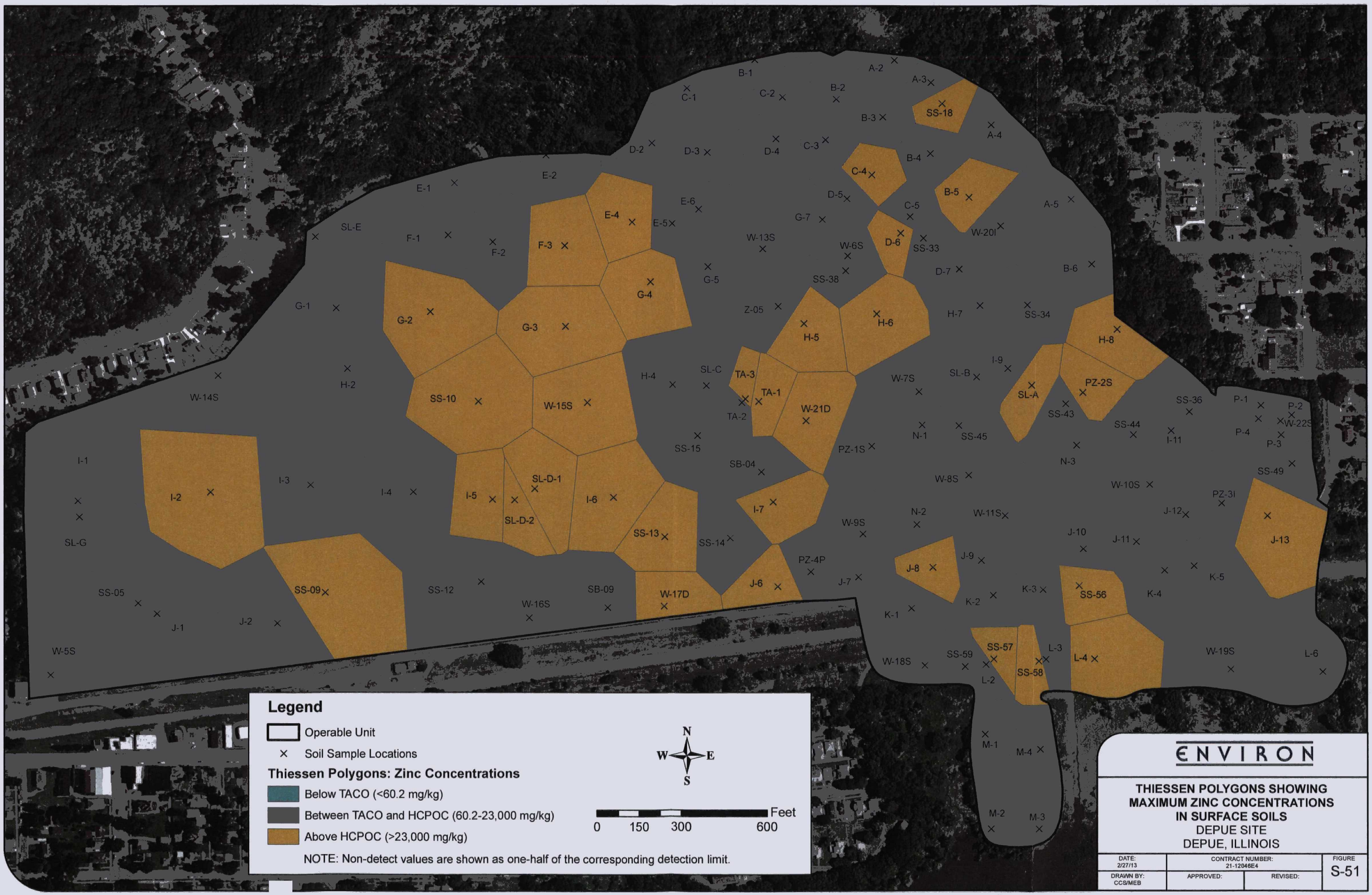
Legend
Operable Unit
Soil Sample Locations
Thiessen Polygons: Zinc Concentrations
Below TACO (<60.2 mg/kg)
Between TACO and HCPOC (60.2-23,000 mg/kg)
Above HCPOC (>23,000 mg/kg)
NOTE: Non-detect values are shown as one-half of the corresponding detection limit.
N
W
E
S
0
150
300
600
Feet
ENVIRON
THIESSEN POLYGONS SHOWING MAXIMUM ZINC CONCENTRATIONS IN SURFACE SOILS
DEPUE SITE
DEPUE, ILLINOIS
DATE: 2/27/13
CONTRACT NUMBER: 21-12046E4
FIGURE S-51
DRAWN BY: CCS/MEB
APPROVED:
REVISED:
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