Appendix B

2016 Supplemental Ecological Evaluation Report

- Figures 3, 4 (Revised), 5, and 6;
- Laboratory Analytical Data Summary Tables
- Sediment Core Logs

Table I
Sample Summary
Former Chevron Facility - Perth Amboy, New Jersey

Sample Designation	Matrix	Sample Depth (ft. bgs)	Sample Date	Analytical Parameters	Analytical Method
Sediment Samples					
SED-02-A	Sediment	6.0-6.5	03/21/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-02-B	Sediment	3.5-4.0	03/21/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-03-B	Sediment	1.5-2.0	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
	Sediment	4.5-5.0	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-03-C	Sediment	1.5-2.0	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
	Sediment	6.0-6.5	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-04-C	Sediment	1.5-2.0	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-06-B	Sediment	4.0-4.5	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-09-A	Sediment	3.0-3.5	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-09-C	Sediment	4.5-5.0	03/20/14	Grain Size, TOC, pH, EPH Fractionated	BNJEPH, SW846 3546, ATSM D422-63, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-19-B	Sediment	6.0-6.5	03/21/14	TAL/TCL +30, Grain Size, TOC, pH, EPH Fractionated	SW846 8260B, SW846 5035, SW846 8270D, SW846 3550C, SW846 8081B, SW846 3546, SW846 8082A, BNJEPH, SW846 6010C, SW846 7471B, ASTM D422-63, SW846 9012 M/LACHAT, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-19-C	Sediment	7.5-8.0	03/21/14	TAL/TCL +30, Grain Size, TOC, pH, EPH Fractionated	SW846 8260B, SW846 5035, SW846 8270D, SW846 3550C, SW846 8081B, SW846 3546, SW846 8082A, BNJEPH, SW846 6010C, SW846 7471B, ASTM D422-63, SW846 9012 M/LACHAT, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-20-A	Sediment	7.0-7.5	02/28/14	TAL/TCL +30, Grain Size, TOC, pH, EPH Fractionated	SW846 8260B, SW846 5035, SW846 8270D, SW846 3550C, SW846 8081B, SW846 3546, SW846 8082A, BNJEPH, SW846 6010C, SW846 7471B, ASTM D422-63, SW846 9012 M/LACHAT, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-20-C	Sediment	7.0-7.5	02/28/14	TAL/TCL +30, Grain Size, TOC, pH, EPH Fractionated	SW846 8260B, SW846 5035, SW846 8270D, SW846 3550C, SW846 8081B, SW846 3546, SW846 8082A, BNJEPH, SW846 6010C, SW846 7471B, ASTM D422-63, SW846 9012 M/LACHAT, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-21-A	Sediment	8.5-9.0	02/28/14	TAL/TCL +30, Grain Size, TOC, pH, EPH Fractionated	SW846 8260B, SW846 5035, SW846 8270D, SW846 3550C, SW846 8081B, SW846 3546, SW846 8082A, BNJEPH, SW846 6010C, SW846 7471B, ASTM D422-63, SW846 9012 M/LACHAT, LLOYD KAHN 1988 MOD, SW846 9045C,D
SED-21-C	Sediment	6.5-7.0	02/28/14	TAL/TCL +30, Grain Size, TOC, pH, EPH Fractionated	SW846 8260B, SW846 5035, SW846 8270D, SW846 3550C, SW846 8081B, SW846 3546, SW846 8082A, BNJEPH, SW846 6010C, SW846 7471B, ASTM D422-63, SW846 9012 M/LACHAT, LLOYD KAHN 1988 MOD, SW846 9045C,D

EPH = Extractable Petroleum Hydrocarbons
TCL+30 = Target Compound List with Library Search
TAL = Target Analyte List
TOC = Total Organic Carbon

Table II
Summary of Total Fractionated Extractable Petroleum Hydrocarbons (EPH) in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

	TRC Sample No.:	SED-02-A/6-6.5	SED-02-B/3.5-4	SED-03-B/1.5-2	SED-03-B/4.5-5	SED-03-C/1.5-2	SED-03-C/6-6.5	SED-04-C/1.5-2	SED-06-B/4-4.5
	Date Sampled:	03/21/14	03/21/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14
	Depth Sampled (ft):	6.0-6.5	3.5-4.0	1.5-2.0	4.5-5.0	1.5-2.0	6.0-6.5	1.5-2.0	4.0-4.5
	Lab Sample No.:	JB62621-2	JB62621-1	JB62513-7	JB62513-8	JB62513-5	JB62513-6	JB62513-4	JB62513-3
	Laboratory:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Equivalent Carbon Range									
Aliphatics	EC9-EC12	1620	1120	125	138	2070	622	64.6	165
	EC12-EC16	6810	2780	490	551	5320	1770	212	498
	EC16-EC21	15600	1930	1480	491	9250	1940	328	581
	EC21-EC40	21300	3210	3280	593	12600	3310	617	1240
Aromatics	EC10-EC12	ND (23)	ND (2.3)	ND (0.93)	20.2	ND (6.9)	175	ND (0.96)	ND (0.88)
	EC12-EC16	1030	397	96.4	102	949	623	ND (1.4)	38
	EC16-EC21	7880	1240	869	315	5090	1890	172	260
	EC21-EC36	5050	1420	1060	220	4950	1700	241	422
Total Concentration		***59300***	*12100*	*7390*	*2430*	***40200***	*12000*	1640	*3200*
Ecological Screening Criterion (ESC)		1700	1700	1700	1700	1700	1700	1700	1700
EPH Product Limit		17000	17000	17000	17000	17000	17000	17000	17000
Above/Below Allowable EPH SRC (i.e., PASS or FAIL)		Above (FAIL)	Above (FAIL)	Above (FAIL)	Above (FAIL)	Above (FAIL)	Above (FAIL)	Below (PASS)	Above (FAIL)

EPH = Extractable Petroleum Hydrocarbons

ND = Not Detected

NA = Not Analyzed

Italics = Above ESC

Bold = Above EPH Product Limit

Table II
Summary of Total Fractionated Extractable Petroleum Hydrocarbons (EPH) in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

	TRC Sample No.:	SED-09-A/3-3.5	SED-09-C/4.5-5	SED-19-B/6-6.5	SED-19-C/7.5-8	SED-20-A	SED-20-C	SED-21-A	SED-21-C
	Date Sampled:	03/20/14	03/20/14	03/21/14	03/21/14	02/28/14	02/28/14	02/28/14	02/28/14
	Depth Sampled (ft):	3.0-3.5	4.5-5.0	6.0-6.5	7.5-8.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
	Lab Sample No.:	JB62513-1	JB62621-2	JB62621-3	JB62621-4	JB60857-1	JB60857-2	JB60857-4	JB60857-3
	Laboratory:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Equivalent Carbon Range									
Aliphatics	EC9-EC12	590	1720	951	369	ND (0.16)	ND (0.18)	23.6	ND (0.18)
	EC12-EC16	1290	2930	2260	1010	ND (0.25)	ND (0.28)	ND (0.25)	ND (0.27)
	EC16-EC21	572	4220	3620	1610	ND (0.22)	ND (0.25)	ND (0.22)	ND (0.24)
	EC21-EC40	1230	9440	4380	3120	48	39.4	61.9	52.5
Aromatics	EC10-EC12	65.6	565	161	56.2	ND (0.17)	ND (0.20)	6.75	ND (0.19)
	EC12-EC16	316	980	693	188	ND (0.25)	ND (0.28)	ND (0.25)	ND (0.27)
	EC16-EC21	530	3610	2200	1010	ND (0.36)	ND (0.41)	ND (0.36)	ND (0.40)
	EC21-EC36	515	4270	1790	801	35.4	ND (0.66)	29.2	ND (0.64)
Total Concentration		*5110*	***27700***	*16000*	*8170*	83.4	39.4	121	52.5
Ecological Screening Criterion (ESC)		1700	1700	1700	1700	1700	1700	1700	1700
EPH Product Limit		17000	17000	17000	17000	17000	17000	17000	17000
Above/Below Allowable EPH SRC (i.e., PASS or FAIL)		Above (FAIL)	Above (FAIL)	Above (FAIL)	Above (FAIL)	Below (PASS)	Below (PASS)	Below (PASS)	Below (PASS)

EPH = Extractable Petroleum Hydrocarbons

ND = Not Detected

NA = Not Analyzed

Italics = Above ESC

Bold = Above EPH Product Limit

Table III
Summary of Volatile Organic Compounds (VOCs) in Sediment
Former Chevron Facility
Perth Amboy, New Jersey

		Sample No.:	SED-19-B/6-6.5		SED-19-C/7.5-8		SED-20-A		SED-20-C		SED-21-A		SED-21-C	
		Date Sampled:	03/21/14		03/21/14		02/28/14		02/28/14		02/28/14		02/28/14	
		Depth (ft):	4.0-4.5		7.5-8.0		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5	
		LAB Sample ID:	JB62621-3		JB62621-4		JB60857-1		JB60857-2		JB60857-4		JB60857-3	
		LAB:	Accutest, NJ		Accutest, NJ		Accutest, NJ		Accutest, NJ		Accutest, NJ		Accutest, NJ	
Parameter (mg/kg)	***ER-L***	***ER-M***												
Acetone	--	--	ND (0.50)		ND (0.97)		ND (0.0049)		ND (0.0052)		ND (0.0044)		ND (0.0055)	
Benzene	*0.34*	--	**0.437**		0.173	J	ND (0.00014)		ND (0.00014)		ND (0.00012)		ND (0.00015)	
Bromochloromethane	--	--	ND (0.057)		ND (0.11)		ND (0.00056)		ND (0.00059)		ND (0.00050)		ND (0.00063)	
Bromodichloromethane	--	--	ND (0.031)		ND (0.060)		ND (0.00030)		ND (0.00032)		ND (0.00027)		ND (0.00034)	
Bromoform	--	--	ND (0.029)		ND (0.056)		ND (0.00028)		ND (0.00030)		ND (0.00025)		ND (0.00032)	
Bromomethane	--	--	ND (0.053)		ND (0.10)		ND (0.00052)		ND (0.00055)		ND (0.00046)		ND (0.00058)	
2-Butanone (MEK)	--	--	ND (0.49)		ND (0.94)		ND (0.0048)		ND (0.0050)		ND (0.0042)		ND (0.0053)	
Carbon Disulfide	--	--	0.0471	J	ND (0.030)		ND (0.00015)		ND (0.00016)		ND (0.00014)		ND (0.00017)	
Carbon tetrachloride	--	--	ND (0.028)		ND (0.054)		ND (0.00027)		ND (0.00028)		ND (0.00024)		ND (0.00030)	
Chlorobenzene	--	--	0.216	J	0.253	J	ND (0.00021)		ND (0.00022)		ND (0.00019)		ND (0.00024)	
Chloroethane	--	--	ND (0.11)		ND (0.21)		ND (0.0011)		ND (0.0011)		ND (0.00096)		ND (0.0012)	
Chloroform	--	--	ND (0.028)		ND (0.054)		ND (0.00028)		ND (0.00029)		ND (0.00024)		ND (0.00031)	
Chloromethane	--	--	ND (0.038)		ND (0.073)		ND (0.00037)		ND (0.00039)		ND (0.00033)		ND (0.00041)	
cis-1,2-Dichloroethene	--	--	ND (0.023)		ND (0.044)		ND (0.00022)		ND (0.00023)		ND (0.00020)		ND (0.00025)	
cis-1,3-Dichloropropene	--	--	ND (0.025)		ND (0.049)		ND (0.00025)		ND (0.00026)		ND (0.00022)		ND (0.00027)	
Cyclohexane	--	--	2.39		1.29		ND (0.00028)		ND (0.00029)		ND (0.00025)		ND (0.00031)	
1,2-Dibromo-3-chloropropane	--	--	ND (0.15)		ND (0.28)		ND (0.0014)		ND (0.0015)		ND (0.0013)		ND (0.0016)	
Dibromochloromethane	--	--	ND (0.027)		ND (0.052)		ND (0.00026)		ND (0.00027)		ND (0.00023)		ND (0.00029)	
1,2-Dibromoethane	*Product Limit*	--	ND (0.061)		ND (0.12)		ND (0.00059)		ND (0.00062)		ND (0.00053)		ND (0.00066)	
1,2-Dichlorobenzene	--	*0.013*	**0.0781**	J	ND (0.072)		ND (0.00037)		ND (0.00038)		ND (0.00032)		ND (0.00041)	
1,3-Dichlorobenzene	--	--	0.0768	J	0.145	J	ND (0.00024)		ND (0.00025)		ND (0.00021)		ND (0.00026)	
1,4-Dichlorobenzene	--	*0.11*	**0.391**	J	**0.971**	J	ND (0.00027)		ND (0.00028)		ND (0.00024)		ND (0.00030)	
Dichlorodifluoromethane	--	--	ND (0.039)		ND (0.075)		ND (0.00038)		ND (0.00040)		ND (0.00034)		ND (0.00043)	
1,1-Dichloroethane	--	--	ND (0.035)		ND (0.067)		ND (0.00034)		ND (0.00036)		ND (0.00030)		ND (0.00038)	
1,2-Dichloroethane	--	--	ND (0.035)		ND (0.069)		ND (0.00035)		ND (0.00036)		ND (0.00031)		ND (0.00039)	
1,1-Dichloroethene	--	--	ND (0.032)		ND (0.061)		ND (0.00031)		ND (0.00033)		ND (0.00028)		ND (0.00035)	
1,2-Dichloropropane	--	--	ND (0.048)		ND (0.093)		ND (0.00047)		ND (0.00049)		ND (0.00042)		ND (0.00053)	
1,3-Dichloropropene (total)	--	--	ND		ND		ND		ND		ND		ND	
Ethylbenzene	*1.4*	--	1.23		**2.27**		ND (0.00019)		ND (0.00020)		ND (0.00017)		ND (0.00021)	
2-Hexanone	--	--	0.794		0.741	J	ND (0.00016)		ND (0.00017)		ND (0.00014)		ND (0.00018)	
Isopropylbenzene	--	--	0.198	J	ND (0.36)		ND (0.0018)		ND (0.0019)		ND (0.0016)		ND (0.0020)	
Methyl Acetate	--	--	18.7		9.16		ND (0.00018)		ND (0.00019)		ND (0.00016)		ND (0.00020)	
Methyl Tert Butyl Ether (MTBE)	--	--	ND (0.038)		ND (0.073)		ND (0.00037)		ND (0.00039)		ND (0.00033)		ND (0.00041)	
4-methyl-2-pentanone (MIBK)	--	--	ND (0.15)		ND (0.28)		ND (0.0014)		ND (0.0015)		ND (0.0013)		ND (0.0016)	
Methylcyclohexane	--	--	18.7		9.16		ND (0.00018)		ND (0.00019)		ND (0.00016)		ND (0.00020)	
Methylene chloride	--	--	ND (0.19)		ND (0.36)		ND (0.0018)		ND (0.0019)		ND (0.0016)		0.0042	J
Styrene	--	--	ND (0.026)		ND (0.050)		ND (0.00025)		ND (0.00026)		ND (0.00022)		ND (0.00028)	
1,1,2,2-Tetrachloroethane	--	--	ND (0.038)		ND (0.073)		ND (0.00037)		ND (0.00039)		ND (0.00033)		ND (0.00041)	
Tetrachloroethene	*0.45*	--	ND (0.045)		ND (0.088)		ND (0.00044)		ND (0.00046)		ND (0.00039)		ND (0.00050)	
Toluene	*2.5*	--	0.0808	J	0.0976 J	J	ND (0.00015)		ND (0.00016)		ND (0.00014)		ND (0.00017)	
trans-1,2-Dichloroethene	--	--	ND (0.030)		ND (0.058)		ND (0.00029)		ND (0.00031)		ND (0.00026)		ND (0.00033)	
trans-1,3-Dichloropropene	--	--	ND (0.030)		ND (0.058)		ND (0.00029)		ND (0.00031)		ND (0.00026)		ND (0.00033)	
Freon 113	--	--	ND (0.048)		ND (0.093)		ND (0.00047)		ND (0.00049)		ND (0.00042)		ND (0.00053)	
1,2,3-Trichlorobenzene	--	--	ND (0.023)		ND (0.044)		ND (0.00022)		ND (0.00023)		ND (0.00020)		ND (0.00025)	
1,1,1-Trichloroethane	--	--	ND (0.032)		ND (0.061)		ND (0.00031)		ND (0.00033)		ND (0.00028)		ND (0.00035)	
1,1,2-Trichloroethane	--	--	ND (0.091)		ND (0.18)		ND (0.00089)		ND (0.00093)		ND (0.00079)		ND (0.00099)	
Trichloroethene	*1.6*	--	ND (0.039)		ND (0.075)		ND (0.00038)		ND (0.00040)		ND (0.00034)		ND (0.00042)	
Trichlorofluoromethane	--	--	ND (0.025)		ND (0.048)		ND (0.00024)		ND (0.00026)		ND (0.00022)		ND (0.00027)	
1,2,4-Trichlorobenzene	--	*0.0048*	ND (0.020)		ND (0.039)		ND (0.00020)		ND (0.00021)		ND (0.00017)		ND (0.00022)	
Vinyl Chloride	--	--	ND (0.038)		ND (0.073)		ND (0.00037)		ND (0.00039)		ND (0.00033)		ND (0.00041)	
m,p-Xylene	--	--	1.72		6.52		ND (0.00052)		ND (0.00055)		ND (0.00047)		ND (0.00059)	
o-Xylene	--	--	2.94		3.15		ND (0.00019)		ND (0.00020)		ND (0.00017)		ND (0.00022)	
Xylenes (total)	*0.12*	--	**4.66**		**9.67**		ND (0.00019)		ND (0.00020)		ND (0.00017)		ND (0.00022)	
Total VOC TIC	--	--	197	J	79	J	ND		ND		ND		ND	

ER-L = NJDEP Eco Screening Criteria Effects Low Range (Saline)
ER-M =NJDEP Eco Screening Criteria Effects Medium Range (Saline)
Bold indicates concentrations above the ER-L
Bold and Underline indicates concentrations above the ER-M
ND = Not Detected
NA = Not Analyzed
J = Estimated value below sample reporting limit

Table IV
Summary of Semi-Volatile Organic Compounds (SVOCs) in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

		Sample No.:	SED-19-B/6-6.5	SED-19-C/7.5-8	SED-20-A	SED-20-C	SED-21-A	SED-21-C
		Date Sampled:	03/21/14	03/21/14	02/28/14	02/28/14	02/28/14	02/28/14
		Depth (ft):	6.0-6.5	7.5-8.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
		LAB Sample ID:	JB62621-3	JB62621-4	JB60857-1	JB60857-2	JB60857-4	JB60857-3
		LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter (mg/kg)	***ER-L***	***ER-M***						
Acenaphthene	*0.016*	*0.5*	ND (0.076)	**1.26**	ND (0.011)	**0.235**	ND (0.0098)	**0.0235** J
Acenaphthylene	*0.044*	*0.64*	ND (0.084)	ND (0.11)	ND (0.012)	ND (0.013)	ND (0.011)	ND (0.013)
Acetophenone	--	--	ND (0.046)	ND (0.060)	ND (0.0065)	ND (0.0073)	ND (0.0060)	ND (0.0071)
Anthracene	*0.085*	*1.1*	**3.55**	**3.16**	0.0521	**0.277**	0.0268 J	0.0748
Atrazine	--	--	ND (0.052)	ND (0.067)	ND (0.0072)	ND (0.0082)	ND (0.0067)	ND (0.0079)
Benzaldehyde	--	--	ND (0.060)	ND (0.078)	ND (0.0084)	ND (0.0096)	ND (0.0078)	ND (0.0093)
Benzo(a)pyrene	*0.43*	*1.6*	**10.6**	**6.24**	0.376	**0.465**	0.199	0.166
Benzo(a)anthracene	*0.261*	*1.6*	**7.03**	**4.63**	**0.345**	**0.475**	0.17	0.151
Benzo(b)fluoranthene	--	*1.8*	**6.94**	**3.91**	0.541	0.608	0.245	0.217
Benzo(ghi)perylene	*0.17*	--	**12.8**	**5.08**	**0.285**	**0.317**	0.155	0.136
Benzo(k)fluoranthene	*0.24*	--	**0.882**	**0.853**	0.185	0.214	0.0922	0.0681
BHC (Benzohexachloride)	*0.003*	--	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	*Product Limit*	--	ND (0.030)	ND (0.039)	ND (0.0043)	0.0959	ND (0.0039)	ND (0.0047)
bis(2-Chloroethoxy)methane	--	--	ND (0.11)	ND (0.14)	ND (0.015)	ND (0.017)	ND (0.014)	ND (0.016)
bis(2-Chloroethyl)ether	--	--	ND (0.079)	ND (0.10)	ND (0.011)	ND (0.013)	ND (0.010)	ND (0.012)
bis(2-Chloroisopropyl)ether	--	--	ND (0.078)	ND (0.10)	ND (0.011)	ND (0.012)	ND (0.010)	ND (0.012)
bis(2-Ethylhexyl)phthalate	*0.18216*	*2.64651*	**7.01**	**23.5**	0.158	**0.277**	0.115	**0.476**
4-Bromophenyl-phenylether	--	--	ND (0.095)	ND (0.12)	ND (0.013)	ND (0.015)	ND (0.012)	ND (0.015)
Butyl benzyl phthalate	--	*0.063*	ND (0.15)	ND (0.20)	ND (0.021)	ND (0.024)	ND (0.020)	ND (0.023)
Caprolactam	--	--	ND (0.083)	ND (0.11)	ND (0.012)	ND (0.013)	ND (0.011)	ND (0.013)
Carbazole	--	--	ND (0.12)	ND (0.16)	0.0641 J	0.207	0.0247 J	0.0355 J
4-Chloroaniline	--	--	ND (0.084)	ND (0.11)	ND (0.012)	ND (0.013)	ND (0.011)	ND (0.013)
4-Chloro-3-methyl phenol	--	--	ND (0.26)	ND (0.34)	ND (0.037)	ND (0.042)	ND (0.034)	ND (0.040)
2-Chloronaphthalene	--	--	ND (0.081)	ND (0.10)	ND (0.011)	ND (0.013)	ND (0.011)	ND (0.012)
2-Chlorophenol	--	*0.008*	ND (0.26)	ND (0.34)	ND (0.037)	ND (0.042)	ND (0.034)	ND (0.040)
4-Chlorophenyl-phenylether	--	--	ND (0.079)	ND (0.10)	ND (0.011)	ND (0.013)	ND (0.010)	ND (0.012)
Chrysene	*0.384*	*2.8*	**11.7**	**6.96**	**0.521**	**0.601**	0.25	0.21
Dibenz(a,h)anthracene	*0.063*	*0.26*	**2.92**	**1.67**	**0.0731**	**0.0816**	0.0382	0.0298 J
Dibenzofuran	--	--	ND (0.078)	ND (0.10)	ND (0.011)	0.22	ND (0.010)	0.0164 J
3,3'-Dichlorobenzidine	--	--	ND (0.067)	ND (0.086)	ND (0.0093)	ND (0.011)	ND (0.0086)	ND (0.010)
2,4-Dichlorophenol	--	*0.005*	ND (0.42)	ND (0.55)	ND (0.059)	ND (0.067)	ND (0.055)	ND (0.065)
Diethyl phthalate	--	*0.006*	ND (0.089)	ND (0.12)	ND (0.013)	ND (0.014)	ND (0.012)	ND (0.014)
2,4-Dimethyl phenol	--	--	ND (0.44)	ND (0.57)	ND (0.062)	ND (0.070)	ND (0.057)	ND (0.068)
Dimethyl phthalate	--	--	ND (0.092)	ND (0.12)	ND (0.013)	ND (0.015)	ND (0.012)	ND (0.014)
Di-n-butyl phthalate	--	*0.058*	ND (0.058)	ND (0.075)	ND (0.0081)	ND (0.0092)	ND (0.0075)	ND (0.0089)
4,6-Dinitro-o-cresol	--	--	ND (0.32)	ND (0.41)	ND (0.045)	ND (0.051)	ND (0.041)	ND (0.049)
4,6-Dinitro-2-methylphenol	--	--	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	--	--	ND (0.32)	ND (0.41)	ND (0.045)	ND (0.051)	ND (0.041)	ND (0.049)
Dinitrotoluene (2,4-2,6- mixture)	--	--	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	--	--	ND (0.11)	ND (0.15)	ND (0.016)	ND (0.018)	ND (0.015)	ND (0.018)
2,6-Dinitrotoluene	--	--	ND (0.10)	ND (0.13)	ND (0.014)	ND (0.016)	ND (0.013)	ND (0.015)
Di-n-octyl phthalate	--	--	ND (0.13)	ND (0.16)	ND (0.018)	ND (0.020)	ND (0.017)	ND (0.020)
1,4-Dioxane	--	--	ND (0.17)	ND (0.22)	ND (0.024)	ND (0.027)	ND (0.022)	ND (0.026)
Fluoranthene	*0.6*	*5.1*	**6.63**	**5.1**	**0.909**	**1.24**	0.365	0.368
Fluorene	*0.019*	*0.54*	ND (0.086)	**2.57**	0.0145 J	**0.208**	ND (0.011)	**0.0285** J
Hexachlorobenzene	*0.02*	--	ND (0.085)	ND (0.11)	ND (0.012)	ND (0.014)	ND (0.011)	ND (0.013)
Hexachlorobutadiene	--	*0.0013*	ND (0.073)	ND (0.094)	ND (0.010)	ND (0.012)	ND (0.0094)	ND (0.011)
Hexachlorocyclopentadiene	--	--	ND (0.27)	ND (0.35)	ND (0.037)	ND (0.042)	ND (0.035)	ND (0.041)
Hexachloroethane	--	*0.073*	ND (0.073)	ND (0.094)	ND (0.010)	ND (0.012)	ND (0.0094)	ND (0.011)
Indeno(1,2,3-cd)pyrene	*0.2*	--	**2.89**	**1.79**	**0.282**	**0.32**	0.143	0.101
Isophorone	--	--	ND (0.070)	ND (0.091)	ND (0.0099)	ND (0.011)	ND (0.0091)	ND (0.011)
2-Methylnaphthalene	*0.07*	*0.67*	**14.5**	**14.9**	ND (0.020)	**0.438**	ND (0.019)	ND (0.022)
2-Methylphenol	--	--	ND (0.30)	ND (0.39)	ND (0.042)	ND (0.047)	ND (0.039)	ND (0.046)
3&4-Methylphenol	--	--	ND (0.33)	ND (0.43)	ND (0.047)	ND (0.053)	ND (0.043)	ND (0.051)
Naphthalene	*0.16*	*2.1*	**3.12**	**4.06**	ND (0.010)	**0.268**	ND (0.0093)	ND (0.011)
2-Nitroaniline	--	--	ND (0.12)	ND (0.15)	ND (0.016)	ND (0.018)	ND (0.015)	ND (0.018)
3-Nitroaniline	--	--	ND (0.10)	ND (0.14)	ND (0.015)	ND (0.017)	ND (0.014)	ND (0.016)
4-Nitroaniline	--	--	ND (0.10)	ND (0.13)	ND (0.014)	ND (0.016)	ND (0.013)	ND (0.016)
Nitrobenzene	--	--	ND (0.076)	ND (0.098)	ND (0.011)	ND (0.012)	ND (0.0098)	ND (0.012)
2-Nitrophenol	--	--	ND (0.28)	ND (0.36)	ND (0.039)	ND (0.044)	ND (0.036)	ND (0.043)
4-Nitrophenol	--	--	ND (0.44)	ND (0.57)	ND (0.062)	ND (0.070)	ND (0.057)	ND (0.068)
n-Nitrosodi-n-propylamine	--	--	ND (0.064)	ND (0.083)	ND (0.0089)	ND (0.010)	ND (0.0083)	ND (0.0098)
n-Nitrosodiphenylamine	--	--	ND (0.16)	ND (0.20)	ND (0.022)	ND (0.025)	ND (0.020)	ND (0.024)
p-Chloroaniline	--	--	NA	NA	NA	NA	NA	NA
p-Chloro-m-cresol	--	--	NA	NA	NA	NA	NA	NA
Pentachlorophenol	--	*0.017*	ND (0.45)	ND (0.58)	ND (0.063)	ND (0.071)	ND (0.058)	ND (0.069)
Phenanthrene	*0.24*	*1.5*	**19.2**	**12.6**	**0.37**	**1.15**	0.13	**0.316**
Phenol	--	*0.13*	ND (0.28)	ND (0.36)	ND (0.038)	ND (0.044)	ND (0.036)	ND (0.042)
Pyrene	*0.665*	*2.6*	**13.1**	**12**	**0.813**	**1.09**	0.346	0.408
1,2,4,5-Tetrachlorobenzene	--	--	ND (0.080)	ND (0.10)	ND (0.011)	ND (0.013)	ND (0.010)	ND (0.012)
2,3,4,6-Tetrachlorophenol	--	--	ND (0.27)	ND (0.35)	ND (0.038)	ND (0.043)	ND (0.035)	ND (0.042)
2,4,5-Trichlorophenol	--	*0.003*	ND (0.30)	ND (0.39)	ND (0.043)	ND (0.048)	ND (0.039)	ND (0.047)
2,4,6-Trichlorophenol	--	*0.006*	ND (0.25)	ND (0.32)	ND (0.034)	ND (0.039)	ND (0.032)	ND (0.038)
Low Molecular Weight PAHs	--	--	40.37	38.55	0.4366	2.576	0.1568	0.4428
High Molecular Weight PAHs	--	--	86.092	48.233	4.3301	5.4116	2.0034	1.8549
Total PAHs	*4*	*45*	126.462	86.783	4.7667	7.9876	2.1602	2.2977
Total SVOC TIC	--	--	336 J	221 J	3.06 J	2.95 J	4.91 J	1.27 J
Total VOC and SVOC TICs	--	--	533 J	493 J	3.06 J	2.95 J	4.91 J	1.27 J

ER-L = NJDEP Eco Screening Criteria Effects Low Range (Saline)
ER-M =NJDEP Eco Screening Criteria Effects Medium Range (Saline)
Bold indicates concentrations above the ER-L
Bold and Underlined indicates concentrations above the ER-M
ND = Not Detected
NA = Not Analyzed
J = Estimated value below sample reporting limit

Table V
Summary of Polychlorinated Biphenyls (PCBs) in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

		Sample No.:	SED-19-B/6-6.5		SED-19-C/7.5-8		SED-20-A		SED-20-C		SED-21-A		SED-21-C	
		Date Sampled:	03/21/14		03/21/14		02/28/14		02/28/14		02/28/14		02/28/14	
		Depth (ft):	6.0-6.5		7.5-8.0		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5	
		LAB Sample ID:	JB62621-3		JB62621-4		JB60857-1		JB60857-2		JB60857-4		JB60857-3	
		LAB:	Accutest, NJ		Accutest, NJ		Accutest, NJ		Accutest, NJ		Accutest, NJ		Accutest, NJ	
Parameter (mg/kg)	***ER-L***	***ER-M***												
Aroclor 1016	*0.007*	--	ND (0.028)		ND (0.043)		ND (0.0098)		ND (0.010)		ND (0.0088)		ND (0.0097)	
Aroclor 1221	--	--	ND (0.065)		ND (0.10)		ND (0.023)		ND (0.024)		ND (0.020)		ND (0.022)	
Aroclor 1232	--	--	ND (0.055)		ND (0.085)		ND (0.019)		ND (0.020)		ND (0.017)		ND (0.019)	
Aroclor 1242	--	--	ND (0.035)		ND (0.053)		ND (0.012)		ND (0.013)		ND (0.011)		ND (0.012)	
Aroclor 1248	*0.03*	--	**2.57**		**3.96**	B	ND (0.011)		ND (0.012)		ND (0.010)		ND (0.011)	
Aroclor 1254	*0.06*	--	**4.01**	B	**2.91**		ND (0.018)		ND (0.019)		ND (0.016)		ND (0.017)	
Aroclor 1260	*0.005*	--	ND (0.036)		ND (0.055)		ND (0.012)		ND (0.013)		ND (0.011)		ND (0.012)	
Aroclor 1262	--	--	ND (0.035)		ND (0.053)		ND (0.012)		ND (0.013)		ND (0.011)		ND (0.012)	
Aroclor 1268	--	--	ND (0.032)		ND (0.049)		ND (0.011)		ND (0.012)		ND (0.010)		ND (0.011)	
Total PCBs	*0.023*	*0.18*	**6.58**		**6.87**		ND		ND		ND		ND	

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ND = Not Detected
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J = Estimated value below sample reporting limit
b Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.

Table VI
Summary of Pesticides and Herbicides in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

		Sample No.:	SED-19-B/6-6.5	SED-19-C/7.5-8	SED-20-A	SED-20-C	SED-21-A	SED-21-C
		Date Sampled:	03/21/14	03/21/14	02/28/14	02/28/14	02/28/14	02/28/14
		Depth (ft):	6.0-6.5	7.5-8.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
		LAB Sample ID:	JB62621-3	JB62621-4	JB60857-1	JB60857-2	JB60857-4	JB60857-3
		LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter (mg/kg)	***ER-L***	***ER-M***						
Aldrin	*0.002*	--	ND (0.0010)	ND (0.0015)	ND (0.00035)	ND (0.00037)	ND (0.00031)	ND (0.00034)
alpha-BHC	--	--	ND (0.00065)	ND (0.0010)	ND (0.00023)	ND (0.00024)	ND (0.00020)	ND (0.00022)
alpha-Chlordane	--	--	ND (0.00080)	0.0107	0.0025	ND (0.00030)	ND (0.00025)	ND (0.00027)
beta-BHC	--	--	ND (0.0014)	ND (0.0021)	ND (0.00047)	ND (0.00050)	ND (0.00042)	ND (0.00046)
Chlordane (alpha and gamma)	*0.007*	--	ND (0.00080)	**0.0191**	0.005	ND (0.00030)	ND (0.00025)	ND (0.00027)
4,4'-DDD	*0.002*	*0.02*	**1.83**	**0.0558**	ND (0.00041)	ND (0.00044)	ND (0.00037)	ND (0.00041)
4,4'-DDE	*0.0022*	*0.027*	**0.302**	**0.104**	ND (0.00030)	ND (0.00032)	ND (0.00027)	ND (0.00030)
4,4'-DDT	*0.001*	*0.007*	ND (0.0011)	ND (0.0016)	ND (0.00037)	ND (0.00040)	ND (0.00033)	ND (0.00037)
Delta-BHC	--	--	ND (0.0011)	ND (0.0017)	ND (0.00037)	ND (0.00040)	ND (0.00034)	ND (0.00037)
Dieldrin	*0.002*	--	ND (0.00085)	ND (0.0013)	0.0011	ND (0.00031)	ND (0.00027)	ND (0.00029)
Endrin	*0.003*	--	ND (0.00070)	ND (0.0011)	ND (0.00024)	ND (0.00026)	ND (0.00022)	ND (0.00024)
Endrin Aldehyde	--	--	ND (0.0011)	ND (0.0017)	ND (0.00039)	ND (0.00042)	ND (0.00036)	ND (0.00039)
Endrin Ketone	*Product Limit*	--	ND (0.00088)	ND (0.0014)	ND (0.00031)	ND (0.00033)	ND (0.00028)	ND (0.00030)
Endosulfan-I	--	--	ND (0.00082)	ND (0.0013)	ND (0.00029)	ND (0.00030)	ND (0.00026)	ND (0.00028)
Endosulfan-II	--	--	ND (0.0013)	ND (0.0020)	ND (0.00045)	ND (0.00048)	ND (0.00041)	ND (0.00044)
Endosulfan sulfate	--	--	ND (0.00093)	ND (0.0014)	ND (0.00032)	ND (0.00035)	ND (0.00029)	ND (0.00032)
Lindane (Gamma-BHC)	--	--	ND (0.0011)	ND (0.0016)	ND (0.00037)	ND (0.00039)	ND (0.00033)	ND (0.00036)
Heptachlor	--	*0.0003*	ND (0.0011)	0.0103	ND (0.00037)	ND (0.00039)	ND (0.00033)	ND (0.00036)
Heptachlor epoxide	*0.005*	--	**0.0427**	ND (0.0013)	ND (0.00028)	ND (0.00030)	ND (0.00025)	ND (0.00028)
Methoxychlor	--	--	ND (0.0021)	ND (0.0033)	ND (0.00074)	ND (0.00079)	ND (0.00066)	ND (0.00073)
Toxaphene	--	--	ND (0.027)	ND (0.042)	ND (0.0095)	ND (0.010)	ND (0.0086)	ND (0.0094)
DDT (Total)	*0.0016*	*0.046*	**2.132**	**0.1598**	ND	ND	ND	ND

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Bold and Underlined indicates concentrations above the ER-M
ND = Not Detected
NA = Not Analyzed
J = Estimated value below sample reporting limit
b Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.

Table VII
Summary of Metals in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

		Sample No.:	SED-19-B/6-6.5	SED-19-C/7.5-8	SED-20-A	SED-20-C	SED-21-A	SED-21-C
		Date Sampled:	03/21/14	03/21/14	02/28/14	02/28/14	02/28/14	02/28/14
		Depth (ft):	6.0-6.5	7.5-8.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
		LAB Sample ID:	JB62621-3	JB62621-4	JB60857-1	JB60857-2	JB60857-4	JB60857-3
		LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter (mg/kg)	***ER-L***	***ER-M***						
Aluminum	--	*18000*	10800	10100	6590	5070	6170	8660
Antimony	--	*9.3*	**9.5**	4.1	<2.3	<2.6	<2.3	<2.5
Arsenic	*8.2*	*70*	**47.6**	**62.3**	**8.8**	**11.3**	5.7	3.8
Barium	--	*48*	**161**	**213**	23.4	33.1	<23	<25
Beryllium	--	--	0.81	0.89	0.85	1.3	0.95	0.64
Cadmium	*1.2*	*9.6*	***5.6***	**10**	<0.57	<0.64	<0.57	<0.62
Calcium	--	--	2540	1980	865	910	1150	1240
Chromium	*81*	*370*	72.4	**99.1**	16	29.2	22	20.8
Cobalt	--	*10*	**11**	<9.3	**12.3**	**14.5**	**13.4**	**13.1**
Copper	*34*	*270*	**447**	**337**	28.6	33.6	**41.4**	30.3
Cyanide	--	--	0.43	0.92	<0.26	2.4	<0.24	0.42
Iron	--	--	24400	20000	31900	44800	49500	21500
Lead	*47*	*218*	**817**	**166**	39.5	42.4	33.7	35.7
Magnesium	--	--	3760	3490	2180	1540	1400	2890
Manganese	--	*260*	153	127	199	236	175	150
Mercury	*0.15*	*0.71*	**1.7**	**7.1**	<0.036	<0.041	<0.035	<0.038
Nickel	*t Limit*	*52*	**91.7**	**53.1**	19.3	**25.1**	15.7	**27.1**
Potassium	--	--	2100	<1900	<1100	<1300	<1100	<1200
Selenium	--	*1*	**18.4**	**27.2**	<2.3	<2.6	<2.3	<2.5
Silver	*1*	*3.7*	**1.1**	**2**	**1.2**	**1.2**	**1.1**	<0.62
Sodium	--	--	4490	4990	<1100	<1300	<1100	<1200
Thallium	--	--	<1.5	<1.9	<1.1	<1.3	<1.1	<1.2
Vanadium	--	*57*	**59.8**	**59.3**	22.9	35.8	22.2	30.7
Zinc	*150*	*410*	**476**	**375**	139	**219**	**664**	131

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J = Estimated value below sample reporting limit

Table VIII
Summary of General Chemistry Parameters in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

Sample No.:	SED-02-A/6-6.5	SED-02-B/3.5-4	SED-03-B/1.5-2	SED-03-B/4.5-5	SED-03-C/1.5-2	SED-03-C/6-6.5	SED-04-C/1.5-2	SED-06-B/4-4.5
Date Sampled:	03/21/14	03/21/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14
Depth (ft):	6.0-6.5	3.5-4.0	1.5-2.0	4.5-5.0	1.5-2.0	6.0-6.5	1.5-2.0	4.0-4.5
LAB Sample ID:	JB62621-2	JB62621-1	JB62513-7	JB62513-8	JB62513-5	JB62513-6	JB62513-4	JB62513-3
LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter								
Solids, Percent (%)	47.4	41.8	61.7	57.2	41.6	41.5	50.2	54.4
Total Organic Carbon (mg/kg)	139000	67600	27500	19100	88100	74000	14200	23300
pH (su)	7.61	8.44	7.74	7.31	8.53	7.89	7.6	7.94

Sample No.:	SED-09-A/3-3.5	SED-09-C/4.5-5	SED-19-B/6-6.5	SED-19-C/7.5-8	SED-20-A	SED-20-C	SED-21-A	SED-21-C
Date Sampled:	03/20/14	03/20/14	03/21/14	03/21/14	02/28/14	02/28/14	02/28/14	02/28/14
Depth (ft):	3.0-3.5	4.5-5.0	6.0-6.5	7.5-8.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
LAB Sample ID:	JB62513-1	JB62621-2	JB62621-3	JB62621-4	JB60857-1	JB60857-2	JB60857-4	JB60857-3
LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter								
Solids, Percent (%)	48.7	51.6	65.8	45.3	85.5	80.2	88.2	81.1
Total Organic Carbon (mg/kg)	34100	113000	55900	62600	6210	4570	4370 c	5860
pH (su)	8.22	8.5	7.8	8.68	7.04	6.9	7.12	6.69

ND = Not Detected
NA = Not Analyzed
c = Multiple injections indicate possible sample non-homogeneity.
Bold = Above EPH Product Limit

Table IX
Summary of Grain Size Analysis in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

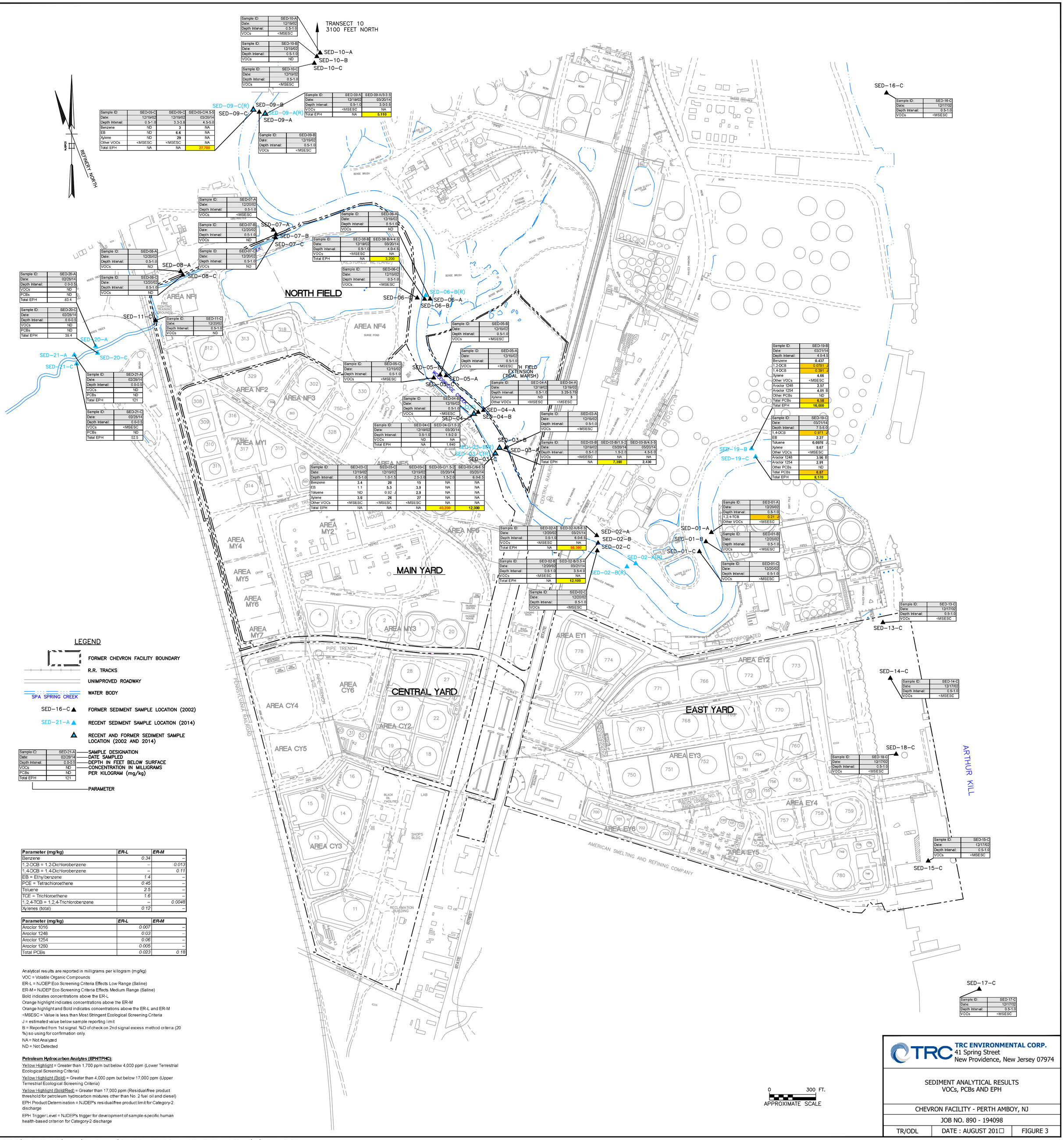
Sample No.:	SED-02-A/6-6.5	SED-02-B/3.5-4	SED-03-B/1.5-2	SED-03-B/4.5-5	SED-03-C/1.5-2	SED-03-C/6-6.5	SED-04-C/1.5-2	SED-06-B/4-4.5	SED-09-A/3-3.5	SED-09-C/4.5-5
Date Sampled:	03/21/14	03/21/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14	03/20/14
Depth (ft):	6.0-6.5	3.5-4.0	1.5-2.0	4.5-5.0	1.5-2.0	6.0-6.5	1.5-2.0	4.0-4.5	3.0-3.5	4.5-5.0
LAB Sample ID:	JB62621-2	JB62621-1	JB62513-7	JB62513-8	JB62513-5	JB62513-7	JB62513-4	JB62513-3	JB62513-1	JB62621-2
LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter (%)										
3 Inch Sieve	100	100	100	100	100	100	100	100	100	100
1.5 Inch Sieve	100	100	100	100	100	100	100	100	100	100
0.75 Inch Sieve	100	100	100	100	100	100	100	100	100	100
0.375 Inch Sieve	100	10	100	100	97	100	100	100	100	100
No.4 Sieve (4.75 mm)	100	100	100	100	95.8	100	100	100	100	100
No.8 Sieve (2.36 mm)	100	100	100	100	90.1	100	100	100	100	100
No.10 Sieve (2.00 mm)	100	100	100	100	88	100	100	100	100	100
No.16 Sieve (1.18 mm)	80.7	99.4	95.4	99.2	84.4	92	99.1	98.2	98.6	98.2
No.30 Sieve (0.60 mm)	79.5	97	88.4	96	77.1	83.5	98.2	96.3	97.3	93.6
No.50 Sieve (0.30 mm)	78.4	95.6	78.2	93.4	70.9	79.8	95.9	93.2	96.8	88.2
No.100 Sieve (0.15 mm)	77.6	93.1	71	87.1	67	75.1	90.2	89.9	96.3	70.2
No.200 Sieve (0.075 mm)	77.5	91.6	70	85.2	65	74.5	89.1	89.1	96.1	61.2
0.030 mm (Hydrometer)	58	86	66	78	51	66	85	94	100	50
0.005 mm (Hydrometer)	13	46	36	30	22	32	34	46	44	18
0.0015 mm (Hydrometer)	8	22	8	20	14	16	17	23	22	7
% Gravel	0	0	0	0	4.2	0	0	0	0	0
% Sand	22.5	8.4	30	14.8	30.8	25.5	10.9	10.9	3.9	38.8
% Silt, Clay, Colloids	77.5	91.6	70	85.2	65	74.5	89.1	89.1	96.1	61.2

Bold = Above EPH Product Limit

Table IX
Summary of Grain Size Analysis in Sediment
Former Chevron Facility - Perth Amboy, New Jersey

Sample No.:	SED-19-B/6-6.5	SED-19-C/7.5-8	SED-20-A	SED-20-C	SED-21-A	SED-21-C
Date Sampled:	03/21/14	03/21/14	02/28/14	02/28/14	02/28/14	02/28/14
Depth (ft):	6.0-6.5	7.5-8.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
LAB Sample ID:	JB62621-3	JB62621-4	JB60857-1	JB60857-2	JB60857-4	JB60857-3
LAB:	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ	Accutest, NJ
Parameter (%)						
3 Inch Sieve	100	100	100	100	100	100
1.5 Inch Sieve	100	100	100	100	100	100
0.75 Inch Sieve	100	100	100	100	100	100
0.375 Inch Sieve	86.8	100	100	96.2	94.9	99
No.4 Sieve (4.75 mm)	83.5	100	94.1	84.4	82.8	82.4
No.8 Sieve (2.36 mm)	77.9	100	81.5	72.4	70.9	61.9
No.10 Sieve (2.00 mm)	76.2	100	77.7	69.4	68.1	57.8
No.16 Sieve (1.18 mm)	50.2	97.7	48.6	57.2	41.9	40.7
No.30 Sieve (0.60 mm)	48.6	96.5	20.7	37.6	15.7	22.8
No.50 Sieve (0.30 mm)	47.4	93.7	8.7	16.7	6.3	8.4
No.100 Sieve (0.15 mm)	46.2	91.3	7.1	7.5	4.9	3.9
No.200 Sieve (0.075 mm)	44.9	89.1	6.7	6.2	4.7	3.5
0.030 mm (Hydrometer)	36	88	<0.83	<0.72	<4.6	<0.61
0.005 mm (Hydrometer)	17	46	<0.83	<0.72	<4.6	<0.61
0.0015 mm (Hydrometer)	8	26	<0.83	<0.72	<4.6	<0.61
% Gravel	16.5	0	5.9	15.7	17.2	17.6
% Sand	38.6	46	87.4	78.2	78.1	78.8
% Silt, Clay, Colloids	44.9	26	6.7	6.2	4.7	3.5

Bold = Above l



Sample ID:	SED-10-A
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-10-B
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-10-C
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-09-C	SED-09-C	SED-09-C/4.5-5
Date:	12/19/02	12/19/02	03/20/14
Depth Interval:	0.5-1.0	3.3-3.8	4.5-5.0
Benzene	ND	**3**	NA
EB	ND	**6.6**	NA
Xylene	ND	**29**	NA
Other VOCs	<MSESC	<MSESC	NA
Total EPH	NA	NA	**27,700**

Sample ID:	SED-09-A	SED-09-A/3-3.5
Date:	12/19/02	03/20/14
Depth Interval:	0.5-1.0	3.0-3.5
VOCs	<MSESC	NA
Total EPH	NA	**5,110**

Sample ID:	SED-09-B
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-16-C
Date:	12/17/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-07-A
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-07-B
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-07-C
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-06-A
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-06-B	SED-06-B/4-4.5
Date:	12/19/02	03/20/14
Depth Interval:	0.5-1.0	4.0-4.5
VOCs	<MSESC	NA
Total EPH	NA	**3,200**

Sample ID:	SED-06-C
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-08-A
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-08-C
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-20-A
Date:	02/28/14
Depth Interval:	0.0-0.5
VOCs	ND
PCBs	ND
Total EPH	83.4

Sample ID:	SED-20-C
Date:	02/28/14
Depth Interval:	0.0-0.5
VOCs	ND
PCBs	ND
Total EPH	39.4

Sample ID:	SED-11-C
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	ND

Sample ID:	SED-21-A
Date:	02/28/14
Depth Interval:	0.0-0.5
VOCs	ND
PCBs	ND
Total EPH	121

Sample ID:	SED-21-C
Date:	02/28/14
Depth Interval:	0.0-0.5
VOCs	<MSESC
PCBs	ND
Total EPH	52.5

Sample ID:	SED-05-B
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-05-A
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-05-C
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-04-A	SED-04-A
Date:	12/19/02	12/19/02
Depth Interval:	0.5-1.0	3.25-3.75
Xylene	ND	**3**
Other VOCs	<MSESC	<MSESC

Sample ID:	SED-04-B
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-04-C	SED-04-C/1.5-2
Date:	12/19/02	03/20/14
Depth Interval:	0.5-1.0	1.5-2.0
VOCs	ND	NA
Total EPH	NA	1,640

Sample ID:	SED-03-A
Date:	12/19/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-03-B	SED-03-B/1.5-2	SED-03-B/4.5-5
Date:	12/19/02	03/20/14	03/20/14
Depth Interval:	0.5-1.0	1.5-2.0	4.5-5.0
VOCs	<MSESC	NA	NA
Total EPH	NA	**7,390**	**2,430**

Sample ID:	SED-03-C	SED-03-C	SED-03-C	SED-03-C/1.5-2	SED-03-C/6-6.5
Date:	12/19/02	12/19/02	12/19/02	03/20/14	03/20/14
Depth Interval:	0.5-1.0	1.0-1.5	2.5-3.0	1.5-2.0	6.0-6.5
Benzene	**3.4**	**20**	**15**	NA	NA
EB	1.1	**5.5**	**3.9**	NA	NA
Toluene	ND	0.92 J	**2.9**	NA	NA
Xylene	**3.6**	**26**	**27**	NA	NA
Other VOCs	<MSESC	<MSESC	<MSESC	NA	NA
Total EPH	NA	NA	NA	**40,200**	**12,000**

Sample ID:	SED-02-A	SED-02-A/6-6.5
Date:	12/20/02	03/21/14
Depth Interval:	0.5-1.0	6.0-6.5
VOCs	<MSESC	NA
Total EPH	NA	**58,300**

Sample ID:	SED-02-B	SED-02-B/3.5-4
Date:	12/20/02	03/21/14
Depth Interval:	0.5-1.0	3.5-4.0
VOCs	<MSESC	NA
Total EPH	NA	**12,100**

Sample ID:	SED-02-C
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-19-B
Date:	03/21/14
Depth Interval:	4.0-4.5
Benzene	**0.437**
1,2-DCB	**0.0781** J
1,4-DCB	**0.391** J
Xylene	**4.66**
Other VOCs	<MSESC
Aroclor 1248	**2.57**
Aroclor 1254	**4.01** B
Other PCBs	ND
Total PCBs	**6.58**
Total EPH	**16,000**

Sample ID:	SED-19-C
Date:	03/21/14
Depth Interval:	7.5-8.0
1,4-DCB	**0.971** J
EB	**2.27**
Toluene	**0.0976** J
Xylene	**9.67**
Other VOCs	<MSESC
Aroclor 1248	**3.96** B
Aroclor 1254	**2.91**
Other PCBs	ND
Total PCBs	**6.87**
Total EPH	**8,170**

Sample ID:	SED-01-A
Date:	12/20/02
Depth Interval:	0.5-1.0
1,2,4-TCB	**0.21** J
Other VOCs	<MSESC

Sample ID:	SED-01-B
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-01-C
Date:	12/20/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-13-C
Date:	12/17/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-14-C
Date:	12/17/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-18-C
Date:	12/17/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-15-C
Date:	12/17/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Sample ID:	SED-17-C
Date:	12/17/02
Depth Interval:	0.5-1.0
VOCs	<MSESC

Parameter (mg/kg)	ER-L	ER-M
Benzene	0.34	--
1,2-DCB = 1,2-Dichlorobenzene	--	0.013
1,4-DCB = 1,4-Dichlorobenzene	--	0.11
EB = Ethylbenzene	1.4	--
PCE = Tetrachloroethene	0.45	--
Toluene	2.5	--
TCE = Trichloroethene	1.6	--
1,2,4-TCB = 1,2,4-Trichlorobenzene	--	0.0048
Xylenes (total)	0.12	--

Parameter (mg/kg)	ER-L	ER-M
Aroclor 1016	0.007	--
Aroclor 1248	0.03	--
Aroclor 1254	0.06	--
Aroclor 1260	0.005	--
Total PCBs	0.023	0.18

Analytical results are reported in milligrams per killogram (mg/kg)
VOC = Volatile Organic Compounds
ER-L = NJDEP Eco Screening Criteria Effects Low Range (Saline)
ER-M = NJDEP Eco Screening Criteria Effects Medium Range (Saline)
Bold indicates concentrations above the ER-L
Orange highlight indicates concentrations above the ER-M
Orange highlight and Bold indicates concentrations above the ER-L and ER-M
<MSESC = Value is less than Most Stringent Ecological Screening Criteria
J = estimated value below sample reporting limit
B = Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.
NA = Not Analyzed
ND = Not Detected

Petroleum Hydrocarbon Analytes (EPH/TPHC):

Yellow Highlight = Greater than 1,700 ppm but below 4,000 ppm (Lower Terrestrial Ecological Screening Criteria)

Yellow Highlight (Bold) = Greater than 4,000 ppm but below 17,000 ppm (Upper Terrestrial Ecological Screening Criteria)

Yellow Highlight (Bold/Red) = Greater than 17,000 ppm (Residual/free product threshold for petroleum hydrocarbon mixtures other than No. 2 fuel oil and diesel)

EPH Product Determination = NJDEP's residual/free product limit for Category-2 discharge

EPH Trigger Level = NJDEP's trigger for development of sample-specific human health-based criterion for Category-2 discharge

TRC ENVIRONMENTAL CORP.
41 Spring Street
New Providence, New Jersey 07974

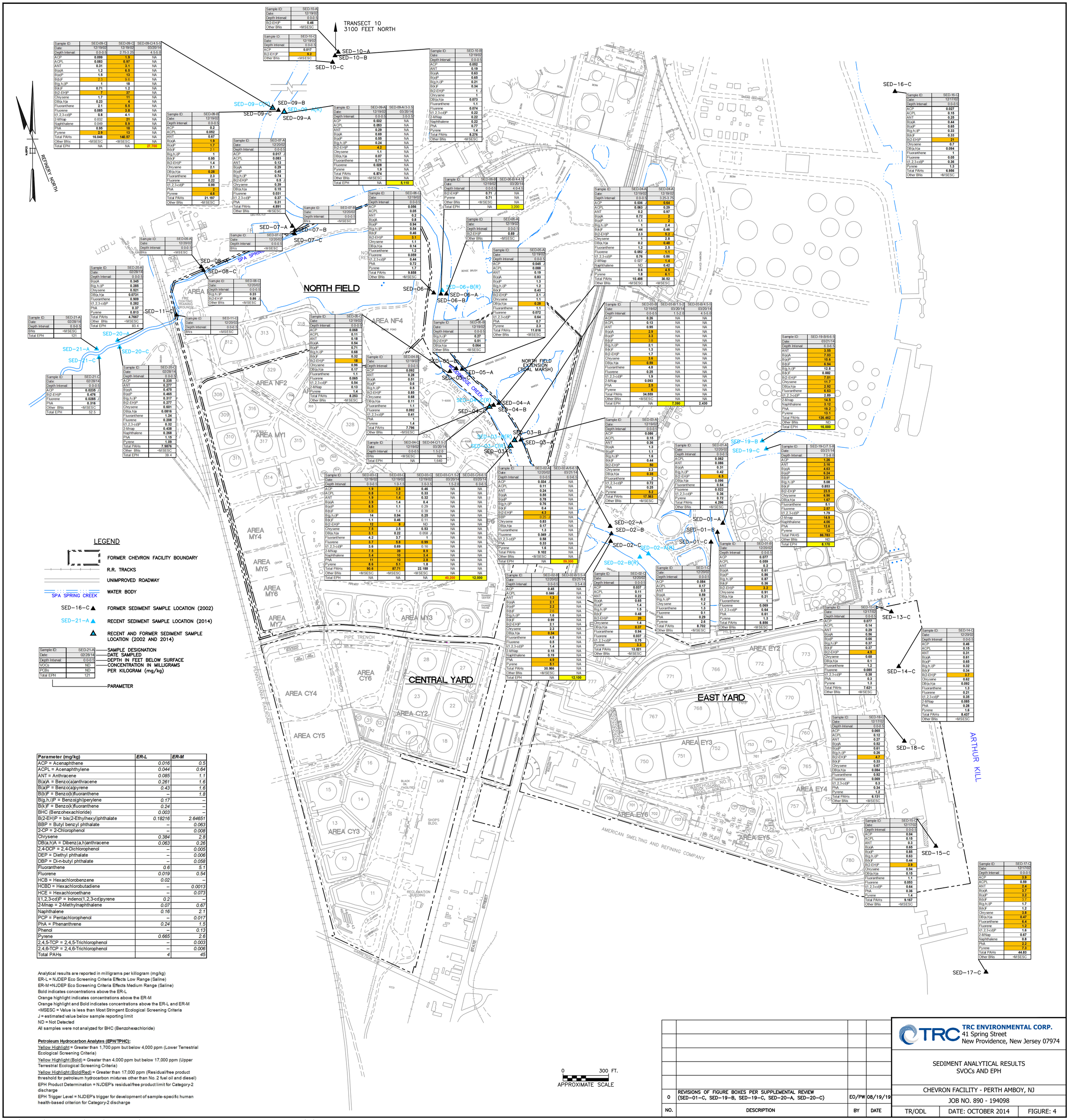
SEDIMENT ANALYTICAL RESULTS
VOCs, PCBs AND EPH

CHEVRON FACILITY - PERTH AMBOY, NJ

JOB NO. 890 - 194098

TR/ODL	DATE : AUGUST 201☐	FIGURE 3

FILE: M:\CAD FILES\VISION PROJECTS\194098\PHASE 000003\FIGURE 3 – SEDIMENT VOCS PCBS EPH.DWG, DATE: 11/01/2016 10:27:23AM



Sample ID:	SED-10-A
Date:	12/19/02
Depth Interval:	0.0-0.5
B(2-EH)P	**0.46**
Other BNs	<MSESC

Sample ID:	SED-10-C
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.017**
B(2-EH)P	**6.2**
Other BNs	<MSESC

Sample ID:	SED-10-B
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.052**
ANT	**0.19**
B(a)A	**0.63**
B(a)P	**0.65**
B(g,h,i)P	**0.21**
B(k)F	**0.34**
B(2-EH)P	**1** J
Chrysene	**1**
DB(a,h)a	**0.073**
Fluoranthene	**1.1**
Fluorene	**0.074**
I(1,2,3-cd)P	**0.22**
2-MNap	**0.22**
Naphthalene	**0.22**
PhA	**0.77**
Pyrene	**1.4**
Total PAHs	**8.276**
Other BNs	<MSESC

Sample ID:	SED-09-C	SED-09-C	SED-09-C/4.5-5
Date:	12/19/02	12/19/02	03/20/14
Depth Interval:	0.0-0.5	2.75-3.25	4.5-5.0
ACP	**0.099**	**1.9**	NA
ACPL	**0.083**	**0.97**	NA
ANT	**0.31**	**3.1**	NA
B(a)A	**1.2**	**6.5**	NA
B(a)P	**1.5**	**13**	NA
B(b)F	2.3	9.6	NA
B(g,h,i)P	**1**	**18**	NA
B(k)F	**0.71**	**1.2**	NA
B(2-EH)P	**7**	**37**	NA
Chrysene	**1.7**	**11**	NA
DB(a,h)a	**0.23**	**4**	NA
Fluoranthene	**2.1**	**5.5**	NA
Fluorene	**0.085**	**3.8**	NA
I(1,2,3-cd)P	**0.8**	**4.1**	NA
2-MNap	0.032	**21**	NA
Naphthalene	0.049	**5.9**	NA
PhA	**0.95**	**18**	NA
Pyrene	**2.9**	**13**	NA
Total PAHs	**16.048**	**140.57**	NA
Other BNs	<MSESC	<MSESC	NA
Total EPH	NA	NA	**27,700**

Sample ID:	SED-09-B
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.2**
ACPL	**0.052**
ANT	**0.67**
B(a)A	**1.9**
B(a)P	**1.7**
B(b)F	2.1
B(g,h,i)P	**1**
B(k)F	**0.95**
B(2-EH)P	**1.4**
Chrysene	**2.1**
DB(a,h)a	**0.28**
Fluoranthene	**2.3**
Fluorene	**0.22**
I(1,2,3-cd)P	**0.99**
PhA	**2**
Pyrene	**4.6**
Total PAHs	**21.197**
Other BNs	<MSESC

Sample ID:	SED-09-A	SED-09-A/3.5-5
Date:	12/19/02	03/20/14
Depth Interval:	0.0-0.5	3.0-3.5
ACP	**0.032**	NA
ACPL	**0.083**	NA
ANT	**0.29**	NA
B(a)A	**0.69**	NA
B(a)P	**0.55**	NA
B(g,h,i)P	**0.24**	NA
B(2-EH)P	**4.2**	NA
Chrysene	**1.1**	NA
DB(a,h)a	**0.07**	NA
Fluoranthene	**0.71**	NA
Fluorene	**0.028**	NA
Pyrene	**1.9**	NA
Total PAHs	**6.874**	NA
Other BNs	<MSESC	NA
Total EPH	NA	**5,110**

Sample ID:	SED-07-A
Date:	12/20/02
Depth Interval:	0.0-0.5
ACP	**0.017** J
ACPL	**0.083**
ANT	**0.13**
B(a)A	**0.29**
B(a)P	**0.45**
B(g,h,i)P	**0.74**
B(2-EH)P	**0.5** J
Chrysene	**0.39**
DB(a,h)a	**0.15**
Fluorene	**0.031**
I(1,2,3-cd)P	**0.37**
PhA	**0.31**
Total PAHs	**4.891**
Other BNs	<MSESC

Sample ID:	SED-07-B
Date:	12/20/02
Depth Interval:	0.0-0.5
BNs	<MSESC

Sample ID:	SED-07-C
Date:	12/20/02
Depth Interval:	0.0-0.5
BNs	<MSESC

Sample ID:	SED-08-A
Date:	12/20/02
Depth Interval:	0.0-0.5
BNs	<MSESC

Sample ID:	SED-08-C
Date:	12/20/02
Depth Interval:	0.0-0.5
B(g,h,i)P	**0.23**
B(2-EH)P	**0.86** J
Other BNs	<MSESC

Sample ID:	SED-06-C
Date:	12/18/02
Depth Interval:	0.0-0.5
ACP	**0.056**
ACPL	**0.05**
ANT	**0.2**
B(a)A	**0.8**
B(a)P	**0.94**
B(g,h,i)P	**0.54**
B(k)F	**0.46**
B(2-EH)P	**3.1**
Chrysene	**1.1**
DB(a,h)a	**0.14**
Fluoranthene	**1.2**
Fluorene	**0.059**
I(1,2,3-cd)P	**0.44**
PhA	**0.72**
Pyrene	**1.7**
Total PAHs	**9.858**
Other BNs	<MSESC

Sample ID:	SED-06-B	SED-06-B/4.4-5
Date:	12/18/02	03/20/14
Depth Interval:	0.0-0.5	4.0-4.5
B(2-EH)P	**0.71** J	NA
Pyrene	**0.71**	NA
Other BNs	<MSESC	NA
Total EPH	NA	3,200

Sample ID:	SED-06-A
Date:	12/19/02
Depth Interval:	0.0-0.5
B(2-EH)P	**0.69** J
Other BNs	<MSESC

Sample ID:	SED-05-A
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.045** J
ACPL	**0.088**
ANT	**0.19**
B(a)A	**0.83**
B(a)P	**1.3**
B(g,h,i)P	**1.2**
B(k)F	**0.43**
B(2-EH)P	**2.1** J
Chrysene	**1.1**
DB(a,h)a	**0.28**
Fluoranthene	**1.1**
Fluorene	**0.072**
I(1,2,3-cd)P	**0.64**
PhA	**0.7**
Pyrene	**2.3**
Total PAHs	**11.616**
Other BNs	<MSESC

Sample ID:	SED-05-B
Date:	12/19/02
Depth Interval:	0.0-0.5
B(g,h,i)P	**0.27**
B(2-EH)P	**0.51**
DB(a,h)a	**0.064**
Other BNs	<MSESC

Sample ID:	SED-04-A	SED-04-A
Date:	12/19/02	12/19/02
Depth Interval:	0.0-0.5	3.25-3.75
ACP	**0.036**	**0.64**
ACPL	**0.063** J	**0.29**
ANT	**0.2**	**0.97**
B(a)A	**0.72**	**2**
B(a)P	**1.1**	**2**
B(g,h,i)P	**1**	**2.4**
B(k)F	**0.44**	**0.46**
B(2-EH)P	**2.3**	**8.2** J
Chrysene	**1**	**2.8**
DB(a,h)a	**0.2**	**0.48**
Fluoranthene	**1.2**	**2.5**
Fluorene	**0.052** J	**1.1**
I(1,2,3-cd)P	**0.76**	**0.86**
2-MNap	0.027 J	**1.4**
Naphthalene	ND	**0.42**
PhA	**0.6**	**4.5**
Pyrene	**1.8**	**6.1**
Total PAHs	**10.498**	**30.52**
Other BNs	<MSESC	<MSESC

Sample ID:	SED-03-B	SED-03-B/1.5-2	SED-03-B/4.5-5
Date:	12/19/02	03/20/14	03/20/14
Depth Interval:	0.0-0.5	1.5-2.0	4.5-5.0
ACP	**0.26**	NA	NA
ACPL	**0.13**	NA	NA
ANT	**0.95**	NA	NA
B(a)A	**2.9**	NA	NA
B(a)P	**3.3**	NA	NA
B(b)F	3.8	NA	NA
B(g,h,i)P	**2.1**	NA	NA
B(k)F	**1.3**	NA	NA
B(2-EH)P	**1.7**	NA	NA
Chrysene	**3.6**	NA	NA
DB(a,h)a	**0.59**	NA	NA
Fluoranthene	**4.8**	NA	NA
Fluorene	**0.25**	NA	NA
I(1,2,3-cd)P	**1.9**	NA	NA
2-MNap	**0.093**	NA	NA
PhA	**2.5**	NA	NA
Pyrene	**6**	NA	NA
Total PAHs	**34.559**	NA	NA
Other BNs	<MSESC	NA	NA
Total EPH	NA	**7,390**	**2,430**

Sample ID:	SED-19-B/6-6.5
Date:	03/21/14
Depth Interval:	6.0-6.5
ANT	**3.55**
B(a)A	**7.03**
B(a)P	**10.6**
B(b)F	**6.94**
B(g,h,i)P	**12.8**
B(k)F	**0.882**
B(2-EH)P	**7.01**
Chrysene	**11.7**
DB(a,h)a	**2.92**
Fluoranthene	**6.63**
I(1,2,3-cd)P	**2.89**
2-MNap	**14.5**
Naphthalene	**3.12**
PhA	**19.2**
Pyrene	**13.1**
Total PAHs	**126.462**
Other BNs	ND
Total EPH	**16,000**

Sample ID:	SED-16-C
Date:	12/17/02
Depth Interval:	0.0-0.5
ACP	**0.027**
ACPL	**0.15**
ANT	**0.25**
B(a)A	**0.44**
B(a)P	**0.65**
B(g,h,i)P	**0.33**
B(k)F	**0.33**
B(2-EH)P	**21**
Chrysene	**0.7**
DB(a,h)a	**0.094**
Fluoranthene	**1**
Fluorene	**0.05**
I(1,2,3-cd)P	**0.36**
Pyrene	**1.3**
Total PAHs	**6.956**
Other BNs	<MSESC

Sample ID:	SED-20-A
Date:	02/28/14
Depth Interval:	0.0-0.5
B(a)A	**0.345**
B(g,h,i)P	**0.285**
Chrysene	**0.521**
DB(a,h)a	**0.0731**
Fluoranthene	**0.909**
I(1,2,3-cd)P	**0.282**
PhA	**0.37**
Pyrene	**0.813**
Total PAHs	**4.7667**
Other BNs	<MSESC
Total EPH	83.4

Sample ID:	SED-21-A
Date:	02/28/14
Depth Interval:	0.0-0.5
BNs	<MSESC
Total EPH	121

Sample ID:	SED-11-C
Date:	12/20/02
Depth Interval:	0.0-0.5
BNs	<MSESC

Sample ID:	SED-20-C
Date:	02/28/14
Depth Interval:	0.0-0.5
ACP	**0.235**
ANT	**0.277**
B(a)A	**0.475**
B(a)P	**0.465**
B(g,h,i)P	**0.317**
B(2-EH)P	**0.277**
Chrysene	**0.601**
DB(a,h)a	**0.0816**
Fluoranthene	**1.24**
Fluorene	**0.208**
I(1,2,3-cd)P	**0.32**
2-Mnap	**0.438**
Naphthalene	**0.268**
PhA	**1.15**
Pyrene	**1.09**
Total PAHs	**7.9876**
Other BNs	<MSESC
Total EPH	39.4

Sample ID:	SED-21-C
Date:	02/28/14
Depth Interval:	0.0-0.5
ACP	**0.0235** J
B(2-EH)P	**0.476**
Fluorene	**0.0285** J
PhA	**0.316**
Other BNs	<MSESC
Total EPH	52.5

Sample ID:	SED-05-C
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.068**
ACPL	**0.11**
ANT	**0.18**
B(a)A	**0.54**
B(a)P	**0.71**
B(g,h,i)P	**0.68**
B(k)F	**0.32**
B(2-EH)P	**18**
Chrysene	**0.96**
DB(a,h)a	**0.17**
Fluoranthene	**1.1**
Fluorene	**0.065**
I(1,2,3-cd)P	**0.54**
2-MNap	**0.13**
Pyrene	**1.4**
Total PAHs	**8.253**
Other BNs	<MSESC

Sample ID:	SED-04-B
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.092**
ANT	**0.28**
B(a)A	**0.51**
B(a)P	**0.6**
B(g,h,i)P	**0.5**
B(2-EH)P	**0.85**
Chrysene	**0.68**
DB(a,h)a	**0.11**
Fluoranthene	**1.1**
Fluorene	**0.092**
I(1,2,3-cd)P	**0.41**
PhA	**1**
Pyrene	**1.4**
Total PAHs	**7.796**
Other BNs	<MSESC

Sample ID:	SED-04-C	SED-04-C/1.5-2
Date:	12/19/02	03/20/14
Depth Interval:	0.0-0.5	1.5-2.0
BNs	<MSESC	NA
Total EPH	NA	1,640

Sample ID:	SED-03-A
Date:	12/19/02
Depth Interval:	0.0-0.5
ACP	**0.086** J
ACPL	**0.15**
ANT	**0.36**
B(a)A	**1.3**
B(a)P	**1.1**
B(g,h,i)P	**1.6**
B(k)F	**0.44**
B(2-EH)P	**50**
Chrysene	**2.3**
DB(a,h)a	**0.35**
Fluoranthene	**2**
I(1,2,3-cd)P	**0.72**
PhA	**0.25**
Pyrene	**5.2**
Total PAHs	**17.563**
Other BNs	<MSESC

Sample ID:	SED-01-A
Date:	12/20/02
Depth Interval:	0.0-0.5
ACPL	**0.062**
ANT	**0.086**
B(a)A	**0.31**
B(g,h,i)P	**0.42**
B(2-EH)P	**8.5**
DB(a,h)a	**0.096**
Fluoranthene	**0.64**
Fluorene	**0.022**
I(1,2,3-cd)P	**0.36**
Pyrene	**0.72**
Total PAHs	**4.296**
Other BNs	<MSESC

Sample ID:	SED-19-C/7.5-8
Date:	03/21/14
Depth Interval:	7.5-8.0
ACP	**1.26**
ANT	**3.16**
B(a)A	**4.63**
B(a)P	**6.24**
B(b)F	**3.91**
B(g,h,i)P	**5.08**
B(k)F	**0.853**
B(2-EH)P	**23.5**
Chrysene	**6.96**
DB(a,h)a	**1.67**
Fluoranthene	**5.1**
Fluorene	**2.57**
I(1,2,3-cd)P	**1.79**
2-Mnap	**14.9**
Naphthalene	**4.06**
PhA	**12.6**
Pyrene	**12**
Total PAHS	**86.783**
Other BNs	ND
Total EPH	**8,170**

Sample ID:	SED-03-C	SED-03-C	SED-03-C	SED-03-C/1.5-2	SED-03-C/6-6.5
Date:	12/19/02	12/19/02	12/19/02	03/20/14	03/20/14
Depth Interval:	0.0-0.5	1.0-1.5	3.0-3.5	1.5-2.0	6.0-6.5
ACP	**1.9**	**2.8**	**0.46**	NA	NA
ACPL	**0.8**	**1.2**	**0.33**	NA	NA
ANT	**1.9**	**1.4**	**0.32**	NA	NA
B(a)A	**3.9**	**1.4**	**0.4**	NA	NA
B(a)P	**8.5**	**1.1**	0.29	NA	NA
B(b)F	5.9	1.4	0.39	NA	NA
B(g,h,i)P	**14**	**0.94**	**0.25**	NA	NA
B(k)F	**1.1**	**0.46**	0.11	NA	NA
B(2-EH)P	**12**	**8**	ND	NA	NA
Chrysene	**7.8**	**2.5**	**0.53**	NA	NA
DB(a,h)a	**3.1**	**0.22**	0.058 J	NA	NA
Fluoranthene	**4.2**	**3.7**	**1**	NA	NA
Fluorene	**3.7**	**5.8**	**0.99**	NA	NA
I(1,2,3-cd)P	**3.6**	**0.69**	0.16	NA	NA
2-MNap	**7.5**	**39**	**8.9**	NA	NA
Naphthalene	**3.4**	**10**	**3.4**	NA	NA
PhA	**11**	**10**	**2.8**	NA	NA
Pyrene	**8.6**	**5.1**	**1.8**	NA	NA
Total PAHs	**90.6**	**87.71**	**22.188**	NA	NA
Other BNs	<MSESC	<MSESC	<MSESC	NA	NA
Total EPH	NA	NA	NA	**40,200**	**12,000**

Sample ID:	SED-02-A	SED-02-A/6-6.5
Date:	12/20/02	03/21/14
Depth Interval:	0.0-0.5	6.0-6.5
ACP	**0.034** J	NA
ACPL	**0.11**	NA
ANT	**0.24**	NA
B(a)A	**0.55**	NA
B(a)P	**0.78**	NA
B(g,h,i)P	**0.76**	NA
B(k)F	**0.4**	NA
B(2-EH)P	**4.3**	NA
BBP	0.25 J	NA
Chrysene	**0.83**	NA
DB(a,h)a	**0.17**	NA
Fluoranthene	**1.3**	NA
Fluorene	**0.049** J	NA
I(1,2,3-cd)P	**0.58**	NA
PhA	**0.33**	NA
Pyrene	**1.6**	NA
Total PAHs	**9.102**	NA
Other BNs	<MSESC	NA
Total EPH	NA	**59,300**

Sample ID:	SED-02-B	SED-02-B/3.5-4
Date:	12/20/02	03/21/14
Depth Interval:	0.0-0.5	3.5-4.0
ACP	**0.45**	NA
ACPL	**0.046** J	NA
ANT	**1.3**	NA
B(a)A	**2.1**	NA
B(a)P	**2.2**	NA
B(b)F	2.6	NA
B(g,h,i)P	**1.6**	NA
B(k)F	**0.99**	NA
B(2-EH)P	**2.1**	NA
Chrysene	**2.3**	NA
DB(a,h)a	**0.34**	NA
Fluoranthene	**4.6**	NA
Fluorene	**0.5**	NA
I(1,2,3-cd)P	**1.4**	NA
2-MNap	**0.15**	NA
Naphthalene	**0.19**	NA
PhA	**4.9**	NA
Pyrene	**5.1**	NA
Total PAHs	**30.966**	NA
Other BNs	<MSESC	NA
Total EPH	NA	**12,100**

Sample ID:	SED-02-C
Date:	12/20/02
Depth Interval:	0.0-0.5
ACP	**0.037** J
ACPL	**0.11**
ANT	**0.22**
B(a)A	**0.65**
B(a)P	**1.4**
B(g,h,i)P	**1.5**
B(k)F	**0.48**
B(2-EH)P	**20**
Chrysene	**1.4**
DB(a,h)a	**0.37**
Fluoranthene	**0.94**
Fluorene	**0.037** J
I(1,2,3-cd)P	**0.75**
Pyrene	**3.3**
Total PAHs	**13.021**
Other BNs	<MSESC

Sample ID:	SED-01-C
Date:	12/20/02
Depth Interval:	0.0-0.5
ACP	**0.084**
ACPL	**0.17**
ANT	**0.5**
B(a)A	**0.59**
B(g,h,i)P	**0.2**
Chrysene	**1.2**
Fluoranthene	**1.3**
Fluorene	**0.1**
PhA	**0.29**
Pyrene	**2.6**
Total PAHs	**8.702**
Other BNs	<MSESC

Sample ID:	SED-01-B
Date:	12/20/02
Depth Interval:	0.0-0.5
ACP	**0.077**
ACPL	**0.059**
ANT	**0.2**
B(a)A	**0.61**
B(a)P	**0.86**
B(g,h,i)P	**0.87**
B(k)F	**0.36**
B(2-EH)P	**3.2**
Chrysene	**0.91**
DB(a,h)a	**0.21**
Fluoranthene	**1**
Fluorene	**0.069**
I(1,2,3-cd)P	**0.64**
PhA	**0.61**
Pyrene	**1.3**
Total PAHs	**8.856**
Other BNs	<MSESC

Sample ID:	SED-13-C
Date:	12/17/02
Depth Interval:	0.0-0.5
ACP	**0.077**
ACPL	**0.14**
ANT	**0.29**
B(a)A	**0.56**
B(a)P	**0.66**
B(g,h,i)P	**0.37**
B(k)F	**0.37**
B(2-EH)P	**4.5**
Chrysene	**0.68**
DB(a,h)a	**0.1**
Fluoranthene	**1.2**
Fluorene	**0.085**
I(1,2,3-cd)P	**0.38**
PhA	**0.3**
Pyrene	**1.3**
Total PAHs	**7.621**
Other BNs	<MSESC

Sample ID:	SED-14-C
Date:	12/20/02
Depth Interval:	0.0-0.5
ACP	**0.46**
ACPL	**0.15**
ANT	**0.31**
B(a)A	**0.61**
B(a)P	**0.65**
B(g,h,i)P	**0.32**
B(k)F	**0.34**
B(2-EH)P	**3.7**
Chrysene	**0.62**
DB(a,h)a	**0.092**
Fluoranthene	**1.3**
Fluorene	**0.21**
I(1,2,3-cd)P	**0.35**
2-MNap	**0.085**
PhA	**0.28**
Pyrene	**1.6**
Total PAHs	**8.437**
Other BNs	<MSESC

Sample ID:	SED-18-C
Date:	12/17/02
Depth Interval:	0.0-0.5
ACP	**0.065**
ACPL	**0.12**
ANT	**0.27**
B(a)A	**0.52**
B(a)P	**0.61**
B(g,h,i)P	**0.26**
B(2-EH)P	**4.7**
B(k)F	**0.33**
Chrysene	**0.67**
DB(a,h)a	**0.084**
Fluoranthene	**0.92**
Fluorene	**0.069**
I(1,2,3-cd)P	**0.3**
PhA	**0.34**
Pyrene	**1.2**
Total PAHs	**6.131**
Other BNs	<MSESC

Sample ID:	SED-15-C
Date:	12/17/02
Depth Interval:	0.0-0.5
ACP	**0.04**
ACPL	**0.15**
ANT	**0.3**
B(a)A	**0.65**
B(a)P	**0.85**
B(g,h,i)P	**0.63**
B(k)F	**0.44**
B(2-EH)P	**3.8**
Chrysene	**0.94**
DB(a,h)a	**0.15**
Fluoranthene	**1.1**
Fluorene	**0.053**
I(1,2,3-cd)P	**0.64**
PhA	**0.36**
Pyrene	**1.4**
Total PAHs	**9.167**
Other BNs	<MSESC

Sample ID:	SED-17-C
Date:	12/17/02
Depth Interval:	0.0-0.5
ACP	**3.9**
ACPL	**0.59**
ANT	**2.4**
B(a)A	**3.7**
B(a)P	**3.2**
B(b)F	3.7
B(g,h,i)P	**1.7**
B(k)F	**1.2**
Chrysene	**3.8**
DB(a,h)a	**0.47**
Fluoranthene	**6.4**
Fluorene	**1.2**
I(1,2,3-cd)P	**1.6**
2-MNap	**0.67**
Naphthalene	**0.8**
PhA	**2.2**
Pyrene	**7.3**
Total PAHs	**44.83**
Other BNs	<MSESC

Parameter (mg/kg)	ER-L	ER-M
ACP = Acenaphthene	0.016	0.5
ACPL = Acenaphthylene	0.044	0.64
ANT = Anthracene	0.085	1.1
B(a)A = Benzo(a)anthracene	0.261	1.6
B(a)P = Benzo(a)pyrene	0.43	1.6
B(b)F = Benzo(b)fluoranthene	–	1.8
B(g,h,i)P = Benzo(ghi)perylene	0.17	–
B(k)F = Benzo(k)fluoranthene	0.24	–
BHC (Benzohexachloride)	0.003	–
B(2-EH)P = bis(2-Ethylhexyl)phthalate	0.18216	2.64651
BBP = Butyl benzyl phthalate	–	0.063
2-CP = 2-Chlorophenol	–	0.008
Chrysene	0.384	2.8
DB(a,h)A = Dibenz(a,h)anthracene	0.063	0.26
2,4-DCP = 2,4-Dichlorophenol	–	0.005
DEP = Diethyl phthalate	–	0.006
DBP = Di-n-butyl phthalate	–	0.058
Fluoranthene	0.6	5.1
Fluorene	0.019	0.54
HCB = Hexachlorobenzene	0.02	–
HCBD = Hexachlorobutadiene	–	0.0013
HCE = Hexachloroethane	–	0.073
I(1,2,3-cd)P = Indeno(1,2,3-cd)pyrene	0.2	–
2-Mnap = 2-Methylnaphthalene	0.07	0.67
Naphthalene	0.16	2.1
PCP = Pentachlorophenol	–	0.017
PhA = Phenanthrene	0.24	1.5
Phenol	–	0.13
Pyrene	0.665	2.6
2,4,5-TCP = 2,4,5-Trichlorophenol	–	0.003
2,4,6-TCP = 2,4,6-Trichlorophenol	–	0.006
Total PAHs	4	45

Analytical results are reported in milligrams per killogram (mg/kg)
ER-L = NJDEP Eco Screening Criteria Effects Low Range (Saline)
ER-M =NJDEP Eco Screening Criteria Effects Medium Range (Saline)
Bold indicates concentrations above the ER-L
Orange highlight indicates concentrations above the ER-M
Orange highlight and Bold indicates concentrations above the ER-L and ER-M
<MSESC = Value is less than Most Stringent Ecological Screening Criteria
J = estimated value below sample reporting limit
ND = Not Detected
All samples were not analyzed for BHC (Benzohexachloride)

Petroleum Hydrocarbon Analytes (EPH/TPHC):
Yellow Highlight = Greater than 1,700 ppm but below 4,000 ppm (Lower Terrestrial Ecological Screening Criteria)
Yellow Highlight (Bold) = Greater than 4,000 ppm but below 17,000 ppm (Upper Terrestrial Ecological Screening Criteria)
Yellow Highlight (Bold/Red) = Greater than 17,000 ppm (Residual/free product threshold for petroleum hydrocarbon mixtures other than No. 2 fuel oil and diesel)
EPH Product Determination = NJDEP's residual/free product limit for Category-2 discharge
EPH Trigger Level = NJDEP's trigger for development of sample-specific human health-based criterion for Category-2 discharge

NO.	DESCRIPTION	BY	DATE
0	REVISIONS OF FIGURE BOXES PER SUPPLEMENTAL REVIEW (SED-01-C, SED-19-B, SED-19-C, SED-20-A, SED-20-C)	EO/PW	08/19/19

TRC ENVIRONMENTAL CORP.
41 Spring Street
New Providence, New Jersey 07974

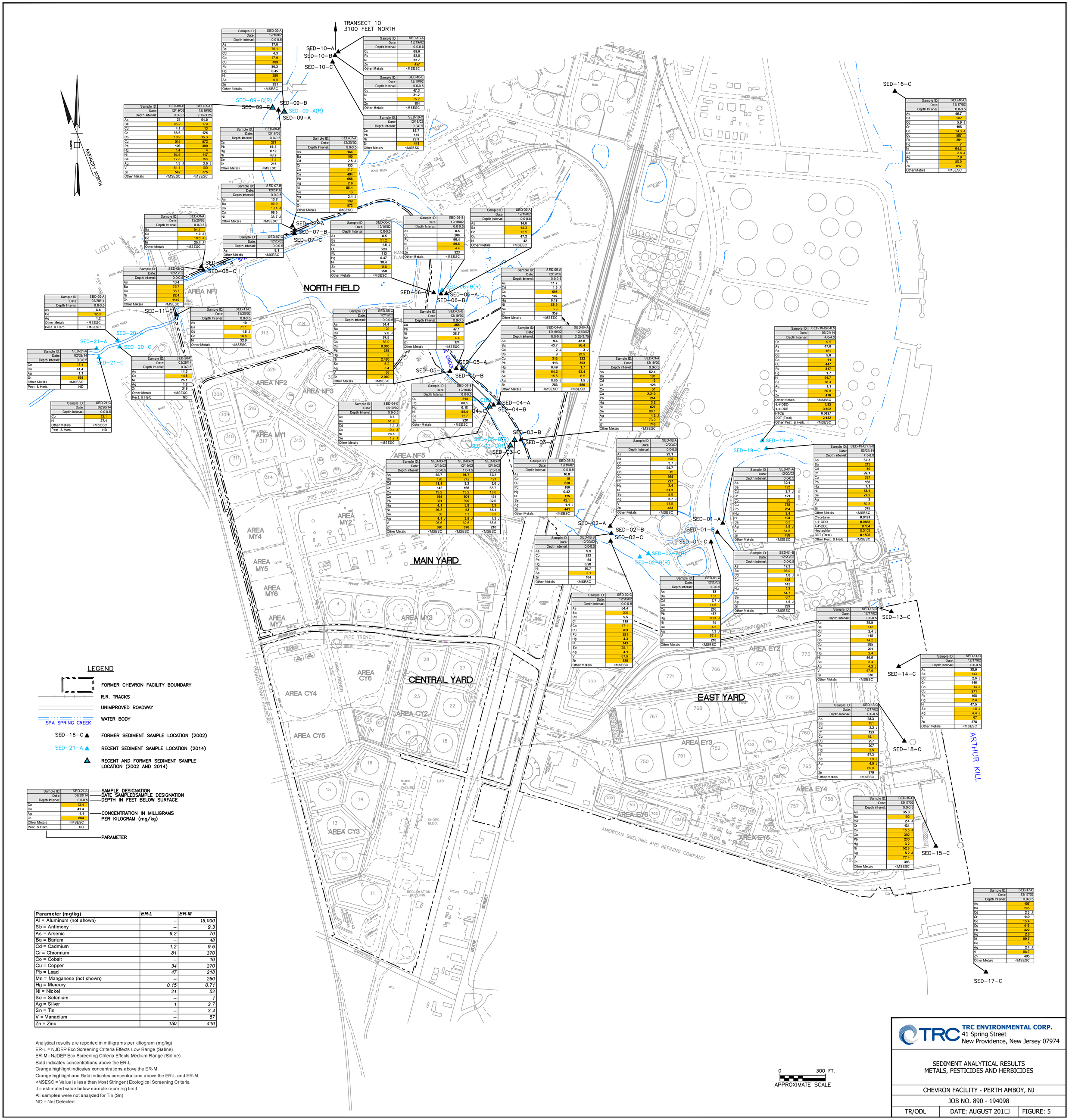
SEDIMENT ANALYTICAL RESULTS
SVOCs AND EPH

CHEVRON FACILITY - PERTH AMBOY, NJ

JOB NO. 890 - 194098

TR/ODL | DATE: OCTOBER 2014 | FIGURE: 4

FILE: M:\CAD FILES\VISION PROJECTS\194098\PHASE 000003\FIGURE 4 – SEDIMENT BNS AND EPH_081919_EO EDIT.DWG, DATE: 08/20/2019 11:21:27AM



Sample ID:	SED-09-A
Date:	12/19/02
Depth Interval:	0.0-0.5
As	17.6
Ba	76.1
Cd	4.3
Co	17.6
Cu	489
Pb	86.3
Hg	0.45
Ni	290
Se	9.9
Zn	251
Other Metals	<MSESC

Sample ID:	SED-10-A
Date:	12/19/02
Depth Interval:	0.0-0.5
Cu	69.6
Pb	52.5
Ni	33.7
Zn	457
Other Metals	<MSESC

Sample ID:	SED-10-B
Date:	12/19/02
Depth Interval:	0.0-0.5
Cu	47.3
Ni	31.2
V	75.2
Zn	184
Other Metals	<MSESC

Sample ID:	SED-10-C
Date:	12/19/02
Depth Interval:	0.0-0.5
Cu	85.7
Pb	110
Ni	28.8
Zn	448
Other Metals	<MSESC

Sample ID:	SED-09-C	SED-09-C
Date:	12/19/02	12/19/02
Depth Interval:	0.0-0.5	2.75-3.25
As	22	64.5
Ba	95.2	179
Cd	4.1 J	13
Cr	68.5	126
Co	18.9	15.3
Cu	545	572
Pb	196	399
Hg	1.4	4
Ni	94.5	117
Se	17.8	154
Ag	1.8 J	3.6 J
V	61.1	100
Zn	542	775
Other Metals	<MSESC	<MSESC

Sample ID:	SED-09-B
Date:	12/19/02
Depth Interval:	0.0-0.5
Cu	271
Pb	65.3
Hg	0.19
Ni	43.9
Se	1.4
Zn	218
Other Metals	<MSESC

Sample ID:	SED-07-A
Date:	12/20/02
Depth Interval:	0.0-0.5
As	164
Ba	165
Cd	2.5 J
Cr	133
Co	17.7
Cu	494
Pb	656
Hg	2.6
Ni	85.1
Se	13
Ag	2.1 J
V	109
Zn	573
Other Metals	<MSESC

Sample ID:	SED-07-B
Date:	12/20/02
Depth Interval:	0.0-0.5
As	10.8
Ba	56.9
Co	10.4 J
Cu	69.5
Ni	33.7 J
Other Metals	<MSESC

Sample ID:	SED-08-A
Date:	12/20/02
Depth Interval:	0.0-0.5
Ba	54.7
Cd	1.3 J
Co	18.8 J
Ni	25.4 J
Other Metals	<MSESC

Sample ID:	SED-07-C
Date:	12/20/02
Depth Interval:	0.0-0.5
As	9.1
Other Metals	<MSESC

Sample ID:	SED-08-C
Date:	12/20/02
Depth Interval:	0.0-0.5
As	10.4
Ba	76.7
Co	36.7
Ni	82.4
Zn	1140
Other Metals	<MSESC

Sample ID:	SED-06-C
Date:	12/19/02
Depth Interval:	0.0-0.5
As	8.5
Ba	51.2
Cd	1.5 J
Cu	223
Pb	113
Hg	0.47
Ni	38.4
Se	9.8
Zn	258
Other Metals	<MSESC

Sample ID:	SED-06-B
Date:	12/19/02
Depth Interval:	0.0-0.5
As	8.5
Cu	206
Pb	90.4
Ni	59.8
Se	4.4
Zn	323
Other Metals	<MSESC

Sample ID:	SED-06-A
Date:	12/19/02
Depth Interval:	0.0-0.5
As	14.6
Ba	48.3
Co	12.5
Cu	47.2
Ni	42
Other Metals	<MSESC

Sample ID:	SED-05-A
Date:	12/19/02
Depth Interval:	0.0-0.5
As	11.7
Cd	1.6 J
Cu	595
Pb	107
Hg	0.19
Ni	86.9
Se	3.9
Zn	359
Other Metals	<MSESC

Sample ID:	SED-11-C
Date:	12/20/02
Depth Interval:	0.0-0.5
As	10
Ba	71.1
Cd	1.6 J
Co	18.8
Ni	32.9
Other Metals	<MSESC

Sample ID:	SED-20-A
Date:	02/28/14
Depth Interval:	0.0-0.5
As	8.8
Co	12.3
Ag	1.2
Other Metals	<MSESC
Pest. & Herb.	<MSESC

Sample ID:	SED-21-A
Date:	02/28/14
Depth Interval:	0.0-0.5
Co	13.4
Cu	41.4
Ag	1.1
Zn	664
Other Metals	<MSESC
Pest. & Herb.	ND

Sample ID:	SED-20-C
Date:	02/28/14
Depth Interval:	0.0-0.5
As	11.3
Co	14.5
Ni	25.1
Ag	1.2
Zn	219
Other Metals	<MSESC
Pest. & Herb.	ND

Sample ID:	SED-21-C
Date:	02/28/14
Depth Interval:	0.0-0.5
Co	13.1
Ni	27.1
Other Metals	<MSESC
Pest. & Herb.	ND

Sample ID:	SED-05-C
Date:	12/19/02
Depth Interval:	0.0-0.5
As	34.4
Ba	129
Cd	2.8 J
Cr	97.5
Co	80.9
Cu	8,030
Pb	378
Hg	2
Ni	2,480
Se	5.2
Ag	5.4
V	68
Zn	2,970
Other Metals	<MSESC

Sample ID:	SED-05-B
Date:	12/19/02
Depth Interval:	0.0-0.5
Cu	355
Pb	47.1
Ni	38.7
Se	4.4
Zn	174
Other Metals	<MSESC

Sample ID:	SED-04-A	SED-04-A
Date:	12/19/02	12/19/02
Depth Interval:	0.0-0.5	3.25-3.75
As	9.4	43.6
Ba	43.7	96.4
Cd	2 J	3 J
Co	9	23.5
Cu	313	322
Pb	113	393
Hg	0.49	1.7
Ni	64.2	63.4
Se	15.5	6.5
Ag	0.85 J	1.5 J
Zn	283	550
Other Metals	<MSESC	<MSESC

Sample ID:	SED-04-B
Date:	12/19/02
Depth Interval:	0.0-0.5
Cu	313
Pb	68.1
Hg	0.18
Ni	55.4
Se	12.7
Zn	228
Other Metals	<MSESC

Sample ID:	SED-04-C
Date:	12/19/02
Depth Interval:	0.0-0.5
As	8.6
Ba	51.9
Cd	1.4 J
Co	10.4 J
Ni	28.8
Se	1.7 J
Other Metals	<MSESC

Sample ID:	SED-03-A
Date:	12/20/02
Depth Interval:	0.0-0.5
As	23.1
Ba	108
Cd	3.7 J
Cr	94.7
Co	15
Cu	564
Pb	227
Hg	2.4
Ni	81.3
Se	5.8
Ag	3.7 J
V	61.9
Zn	483
Other Metals	<MSESC

Sample ID:	SED-03-C	SED-03-C	SED-03-C
Date:	12/19/02	12/19/02	12/19/02
Depth Interval:	0.0-0.5	1.0-1.5	2.5-3.0
As	65.7	91.7	39.2
Ba	128	272	121
Cd	11.1	8.2	2.6 J
Cr	142	166	68.7
Co	13.2	13.2	13.6
Cu	664	601	121
Pb	381	399	82.6
Hg	4.1	5.8	1.3
Ni	96.2	53	36.1
Se	38	7.1	3.3
Ag	4.1 J	3.9 J	1.3 J
V	95.5	62.5	55.6
Zn	690	676	210
Other Metals	<MSESC	<MSESC	<MSESC

Sample ID:	SED-03-B
Date:	12/19/02
Depth Interval:	0.0-0.5
As	16.8
Co	16
Cu	629
Pb	166
Hg	0.42
Ni	125
Se	43.1
Ag	1.1 J
Zn	441
Other Metals	<MSESC

Sample ID:	SED-02-B
Date:	12/20/02
Depth Interval:	0.0-0.5
As	9.9
Cu	213
Pb	54
Hg	0.28
Ni	30.7
Se	2.1
Zn	164
Other Metals	<MSESC

Sample ID:	SED-02-C
Date:	12/20/02
Depth Interval:	0.0-0.5
As	54.4
Ba	200
Cd	9.5
Cr	119
Co	17.1
Cu	763
Pb	291
Hg	4.3
Ni	143
Se	25.1
Ag	4.1
V	67.9
Zn	535
Other Metals	<MSESC

Sample ID:	SED-01-C
Date:	12/20/02
Depth Interval:	0.0-0.5
As	63
Ba	137
Cd	2.7 J
Co	14.6
Cu	210
Pb	137
Hg	0.97 J
Ni	45
Se	4.3
Ag	1.3 J
V	67.1
Zn	218
Other Metals	<MSESC

Sample ID:	SED-01-A
Date:	12/20/02
Depth Interval:	0.0-0.5
As	32.1
Ba	123
Cd	3.7 J
Cr	121
Co	20
Cu	758
Pb	264
Hg	3.4
Ni	104
Se	6.3
Ag	4.9 J
V	64.8
Zn	488
Other Metals	<MSESC

Sample ID:	SED-01-B
Date:	12/20/02
Depth Interval:	0.0-0.5
As	17.3
Ba	66.9
Cd	1.8 J
Cu	428
Pb	142
Hg	1.3
Ni	54.7
Se	6.7
Ag	1.5 J
Zn	289
Other Metals	<MSESC

Sample ID:	SED-19-B/6-6.5
Date:	03/21/14
Depth Interval:	4.0-4.5
Sb	9.5
As	47.6
Ba	181
Cd	5.6
Co	11
Cu	447
Pb	817
Hg	1.7
Ni	91.7
Se	18.4
Ag	1.1
V	59.5
Zn	476
Other Metals	<MSESC
4,4'-DDD	1.83
4,4'-DDE	0.302
HTCE	0.0427
DDT (Total)	2.132
Other Pest. & Herb.	<MSESC

Sample ID:	SED-19-C/7.5-8
Date:	03/21/14
Depth Interval:	7.5-8.0
As	62.3
Ba	213
Cd	10
Cr	99.1
Cu	337
Pb	166
Hg	7.1
Ni	53.1
Se	27.2
Ag	2
V	59.3
Zn	375
Other Metals	<MSESC
Chlordane	0.0191
4,4'-DDD	0.0558
4,4'-DDE	0.104
Heptachlor	0.0103
DDT (Total)	0.1568
Other Pest. & Herb.	<MSESC

Sample ID:	SED-16-C
Date:	12/17/02
Depth Interval:	0.0-0.5
As	46.7
Ba	202
Cd	5.9 J
Cr	198
Co	14.3 J
Cu	587
Pb	291
Hg	7
Ni	64.3
Se	2.8 J
Ag	7.9
V	80.9
Zn	617
Other Metals	<MSESC

Sample ID:	SED-13-C
Date:	12/17/02
Depth Interval:	0.0-0.5
As	29.5
Ba	142
Cd	2.4 J
Cr	118
Co	14.2 J
Cu	265
Pb	201
Hg	2.4
Ni	46.6
Se	3.4
Ag	4.2 J
V	67.6
Zn	376
Other Metals	<MSESC

Sample ID:	SED-14-C
Date:	12/17/02
Depth Interval:	0.0-0.5
As	26.9
Ba	143
Cd	2.6 J
Cr	116
Co	14 J
Cu	271
Pb	198
Hg	2.4
Ni	47.5
Se	1.5 J
Ag	4.4 J
V	67
Zn	378
Other Metals	<MSESC

Sample ID:	SED-18-C
Date:	12/17/02
Depth Interval:	0.0-0.5
As	28.3
Ba	151
Cd	2.2 J
Cr	123
Co	15.1
Cu	257
Pb	207
Hg	2.5
Ni	47.3
Se	1.9 J
Ag	4.5 J
V	69.9
Zn	379
Other Metals	<MSESC

Sample ID:	SED-15-C
Date:	12/17/02
Depth Interval:	0.0-0.5
As	35.8
Ba	192
Cd	2.4 J
Cr	134
Co	15.5 J
Cu	302
Pb	230
Hg	3.2
Ni	52.3
Ag	5.2 J
V	77.4
Zn	393
Other Metals	<MSESC

Sample ID:	SED-17-C
Date:	12/17/02
Depth Interval:	0.0-0.5
As	107
Ba	245
Cd	2.3 J
Cr	140
Co	15.4
Cu	413
Pb	322
Hg	2.6
Ni	58.7
Se	5
Ag	2.4 J
V	58.7
Zn	405
Other Metals	<MSESC

LEGEND

- FORMER CHEVRON FACILITY BOUNDARY
- R.R. TRACKS
- UNIMPROVED ROADWAY
- WATER BODY (SPA SPRING CREEK)
- SED-16-C ▲ FORMER SEDIMENT SAMPLE LOCATION (2002)
- SED-21-A ▲ RECENT SEDIMENT SAMPLE LOCATION (2014)
- ▲ RECENT AND FORMER SEDIMENT SAMPLE LOCATION (2002 AND 2014)

Sample ID:	SED-21-A
Date:	02/28/14
Depth Interval:	0.0-0.5
Co	13.4
Cu	41.4
Ag	1.1
Zn	664
Other Metals	<MSESC
Pest. & Herb.	ND

- SED-21-A — SAMPLE DESIGNATION
- 02/28/14 — DATE SAMPLEDSAMPLE DESIGNATION
- 0.0-0.5 — DEPTH IN FEET BELOW SURFACE
- 13.4, 41.4, 1.1, 664 — CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)
- Co, Cu, Ag, Zn — PARAMETER

Parameter (mg/kg)	ER-L	ER-M
Al = Aluminum (not shown)	--	18,000
Sb = Antimony	--	9.3
As = Arsenic	8.2	70
Ba = Barium	--	48
Cd = Cadmium	1.2	9.6
Cr = Chromium	81	370
Co = Cobalt	--	10
Cu = Copper	34	270
Pb = Lead	47	218
Mn = Manganese (not shown)	--	260
Hg = Mercury	0.15	0.71
Ni = Nickel	21	52
Se = Selenium	--	1
Ag = Silver	1	3.7
Sn = Tin	--	3.4
V = Vanadium	--	57
Zn = Zinc	150	410

Analytical results are reported in milligrams per killogram (mg/kg)
ER-L = NJDEP Eco Screening Criteria Effects Low Range (Saline)
ER-M =NJDEP Eco Screening Criteria Effects Medium Range (Saline)
Bold indicates concentrations above the ER-L
Orange highlight indicates concentrations above the ER-M
Orange highlight and Bold indicates concentrations above the ER-L and ER-M
<MSESC = Value is less than Most Stringent Ecological Screening Criteria
J = estimated value below sample reporting limit
All samples were not analyzed for Tin (Sn)
ND = Not Detected

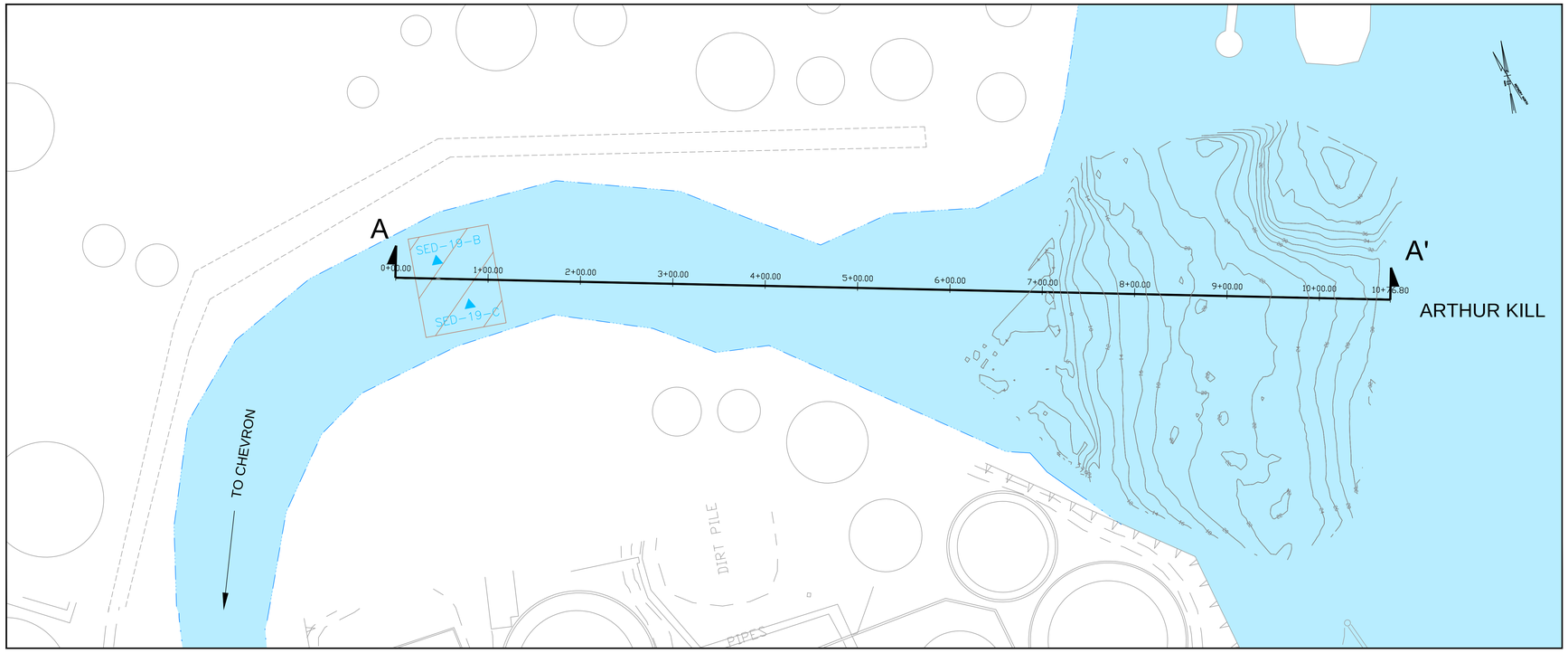
TRC ENVIRONMENTAL CORP.
41 Spring Street
New Providence, New Jersey 07974

SEDIMENT ANALYTICAL RESULTS
METALS, PESTICIDES AND HERBICIDES

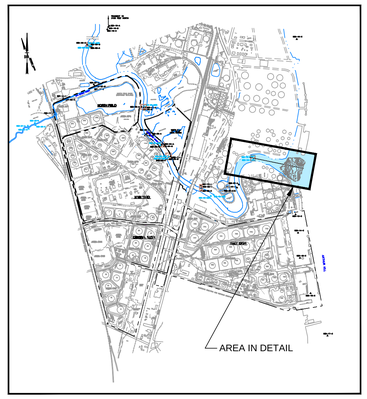
CHEVRON FACILITY - PERTH AMBOY, NJ

JOB NO. 890 - 194098

TR/ODL | DATE: AUGUST 201☐ | FIGURE: 5



PLAN

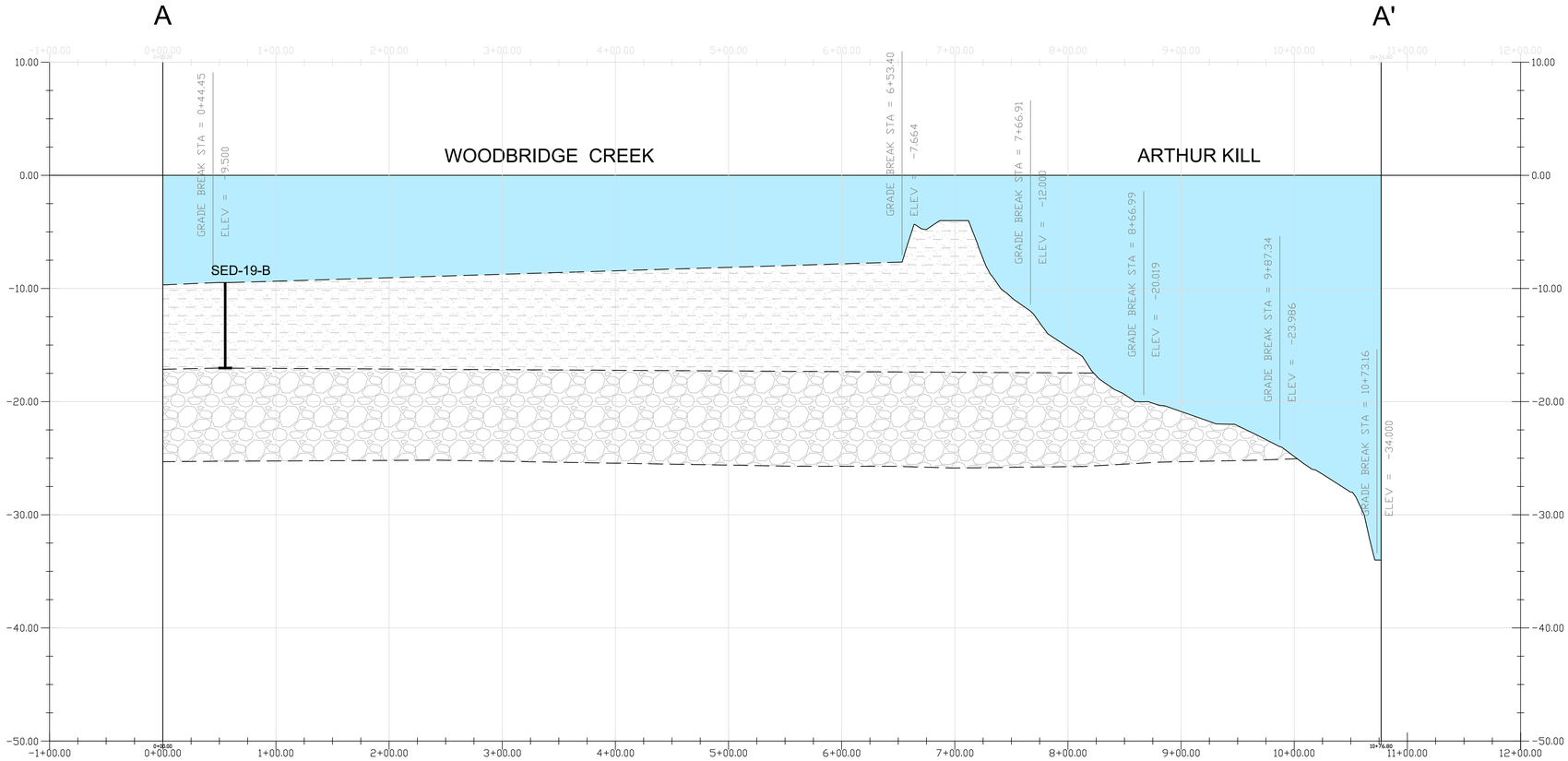


LEGEND

- UNIMPROVED ROADWAY
- WOODBRIDGE CREEK — WATER BODY
- SED-19-C ▲ — SEDIMENT SAMPLE LOCATION
- SURFACE WATER BODY
- CROSS SECTION TRANSECT
- SED-19-B — TRC BORING ID (SAMPLE ID)
- INTERPOLATED SEDIMENTARY LAYER
- WOODBRIDGE CREEK
- SANDY SILT
- GRAVEL/TILL

REFERENCES:

1. WOODBRIDGE CREEK WATER LEVELS BASED ON AVERAGE TIDAL WATER LEVELS.
2. BATHYMETRIC SURVEY SOUNDINGS COLLECTED BY AQUA SURVEY, MARCH 2014.



CROSS SECTION A - A'

TRC ENVIRONMENTAL CORP.
41 Spring Street
New Providence, New Jersey 07974

BATHYMETRIC SURVEY AND CROSS SECTION

CHEVRON FACILITY – PERTH AMBOY, NJ

JOB NO.: 890 – 194098

DM/LB	DATE: AUGUST 2016	FIGURE: 6

FILE: M:\CAD FILES\VISION PROJECTS\194098\PHASE 000003\FIGURE 6 – BATHY SURVEY 2014.DWG, DATE: 11/01/2016 10:34:33AM

2014 SEER

Sediment Core Logs

TRC Environmental Corporation

41 Spring Street, New Providence, NJ 07974 (908)988-1700

Woodbridge Creek Subaqueous Sediments

BORING NUMBER

SED-02-A

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/21/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 5.9 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 6.5 Feet
COORDINATES: X: 621083.9 Y: 558903.1
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							5.9' Water Column; Tide: 4.5'
		52.9		1	GLEY 2 2.5/5B	SM	0 to 6.5' - Dark gray SILT; trace organics. Very soft, wet, odors and black staining.
1							
2		27.2					
3							
	28	17.1					
4							
5		34.3					
6							
		73.4	SED-02-A/6.0-6.5				
7							Refusal at 6.5 feet
8							
9							
10							
11							
12							
13							
14							
15							
16							

TRC Environmental Corporation

41 Spring Street, New Providence, NJ 07974 (908)988-1700

Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-02-B

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/21/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 6.8 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 8 Feet
COORDINATES: X: 621062.8 Y: 558846.4
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							6.8' Water Column; Tide: 4.7'
		4.6		1	GLEY 2 2.5/5B	SM	0 to 8.0' - Dark gray SILT; trace organics. Very soft, wet, odor and black staining.
1		18.1					
2		34.4					
		16.4					
3		24.8					
4	72	49.1	SED-02-B/3.5-4.0				
		16.5					
5		44.6					
6		22.6					
		20.9					
7		3.5					
8		14.6					
							Refusal at 8 feet.
9							
10							
11							
12							
13							
14							
15							
16							

TRC Environmental Corporation

41 Spring Street, New Providence, NJ 07974 (908)988-1700

Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-03-B

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/20/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 6.8 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 6 Feet
COORDINATES: X: 621883.7 Y: 557989.3
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							6.8' Water Column; Tide: 3.1'
		1.6		1	GLEY 2 2.5/5B	SM	0 to 6.0' - Dark gray SILT; trace fine sand and organics. Very soft, wet, odor, sheen and black staining.
1		0.9					
2		1.2	SED-03-B/1.5-2.0				
3	42	7.3					
4		20.2					
5		302	SED-03-B/4.5-5.0				
6		26					
							Refusal at 6 feet
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER

SED-03-C

PROJECT NAME: Former Chevron Facility Woodbridge Creek

Location: Perth Amboy, New Jersey

PROJECT NO.: 194098.0000.0000

Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/20/14**

DRILLER: **A.J. Mottola**

LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"

WATER DEPTH: 5.7 feet

BORING METHOD: Vibracore

PENATRATION DEPTH: 8 Feet

COORDINATES: X: 621821.2 Y: 557981.6

BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							5.7' Water Column; Tide: 3.4'
		1.5		1	GLEY 2 2.5/5B	SM	0 to 8.0' - Dark gray SILT; trace fine sand and organics. Very soft, wet, odor, sheen and black staining.
1		10.6					
2		24.4	SED-03-C/1.5-2.0				
3		54.3					
4	60	49.3					
5		110					
		170					
6		278	SED-03-C/6.0-6.5				
7		186					
8		127					
							Refusal at 8 feet
9							
10							
11							
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER

SED-04-C

PROJECT NAME: Former Chevron Facility Woodbridge Creek

Location: Perth Amboy, New Jersey

PROJECT NO.: 194098.0000.0000

Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/20/14**

DRILLER: **A.J. Mottola**

LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"

WATER DEPTH: 7.6 feet

BORING METHOD: Vibracore

PENATRATION DEPTH: 5 Feet

COORDINATES: X: 622085.2 Y: 557864.3

BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							7.6' Water Column; Tide: 3.8'
1	60	ND	SED-04-C/1.5-2.0	1	GLEY 2 2.5/5B	SM	0 to 5.0' - Dark gray SILT; trace fine sand and organics. Very soft, wet, odors.
		1					
		ND					
2		1.8					
		2.4					
3		10.5					
		5.4					
4		3					
		2.4					
5		0.6					
6							Refusal at 5 feet
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-06-B

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/20/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 6.5 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 8 Feet
COORDINATES: X: 622819.7 Y: 557543.7
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							6.5' Water Column; Tide: 4.0'
		ND		1	GLEY 2 2.5/5B	SM	0 to 8.0' - Dark gray SILT; trace fine sand and organics. Very soft, wet, odors, slight sheen.
1		2.2					
2		1.2					
		0.2					
3		2.4					
4	58	3.1	SED-06-B/4.0-4.5				
5		0.5					
6		ND					High organic content 6 to 8'.
7		0.8					
8		16.3					
							Refusal at 8 feet
9							
10							
11							
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-09-A

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/20/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 6.8 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 5 Feet
COORDINATES: X: 623996.8 Y: 556504.0
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							6.8' Water Column; Tide: 4.6'
1	55	ND	SED-09-A/3.0-3.5	1	GLEY 2 2.5/5B	SM	0 to 5.0' - Dark gray SILT; trace fine sand and organics. Very soft, wet, odors.
2		1.4					
3		44.7					
4		35.5					
5		15.6					
6		33.4					
7		67.8					
8		19.2					
9		8.9					
10		33.4					
11							Refusal at 5 feet
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-09-C

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/20/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 4.8 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 5 Feet
COORDINATES: X: 624032.2 Y: 556472.4
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							4.8' Water Column; Tide: 4.5'
		ND		1	GLEY 2 2.5/5B	SM	0 to 5.0' - Dark gray SILT; trace fine sand and organics. Very soft, wet, odors.
1		ND					
2		ND					
	39	ND					
3		4.7					
4		4.5					Some organics and visible sheen @ 4'.
5		133	SED-09-C/4.5-5.0				
							Refusal at 5 feet.
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-19-B

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/21/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 9.5 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 7.5 Feet
COORDINATES: X: 621827.8 Y: 559652.8
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							9.5' Water Column; Tide: 5.0'
		0.9		1	GLEY 2 2.5/5B	SM	0 to 7.5' - Dark gray SILT; trace organics and fine sand. Very soft, wet, odors and black staining.
1		1.4					
2		3.8					
		11.6					
3		2.2					
4	58	6					
5		26.7					
		39.4					
6		107	SED-19-B/6.0-6.5				Little gravel and rock fragments @ 6 to 7.5'.
7		102					
8							Refusal at 7.5 feet
9							
10							
11							
12							
13							
14							
15							
16							

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Woodbridge Creek Subaqueous Sediments

BORING NUMBER SED-19-C

PROJECT NAME: Former Chevron Facility Woodbridge Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: Aqua Survey, Inc.

DATE DRILLED: **03/21/14**
DRILLER: **A.J. Mottola**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Core Barrel/4"
WATER DEPTH: 0.5 feet
BORING METHOD: Vibracore
PENATRATION DEPTH: 9 Feet
COORDINATES: X: 621774.9 Y: 559679.1
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							0.5' Water Column; Tide: 4.9'
	75	5.2		1	GLEY 2 2.5/5B	SM	0 to 9.0' - Dark gray SILT; trace organics. Very soft, wet, odors and black staining.
1		35.1					
2		17.8					
3		22.2					
4		38.6					
5		15.8					
6		11.3					
7		48.9					
8		136					
9		43.8					
		189	SED-19-C/7.5-8.0				
		68.6					
10							Refusal at 9 feet
11							
12							
13							
14							
15							
16							

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Spas Creek Subaqueous Sediments

BORING NUMBER

SED-20-A

PROJECT NAME: Former Chevron Facility Spas Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: NA

DATE DRILLED: **02/28/14**
DRILLER: **NA**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Macrocore/1"
WATER DEPTH: 1.5 feet
BORING METHOD: Hand Driven Split Spoon
PENATRATION DEPTH: 0.5 Feet
COORDINATES: X: 622461.7 Y: 555411.0
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							1.5' Water Column
	6	ND	SED-20-A/0.0-0.5	1	7.5YR 6/6	SW	0 to 0.5' - Fine to coarse, brown SAND, little silt.
1							End of Boring 0.5 feet
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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Spas Creek Subaqueous Sediments

BORING NUMBER

SED-20-C

PROJECT NAME: Former Chevron Facility Spas Creek
Location: Perth Amboy, New Jersey
PROJECT NO.: 194098.0000.0000
Contractor: NA

DATE DRILLED: **02/28/14**
DRILLER: **NA**
LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Macrocore/1"
WATER DEPTH: 1.5 feet
BORING METHOD: Hand Driven Split Spoon
PENATRATION DEPTH: 0.5 Feet
COORDINATES: X: 622461.7 Y: 555411.0
BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							1.5' Water Column
	6	ND	SED-20-C/0.0-0.5	1	7.5YR 6/6	SW	0 to 0.5' - Fine to coarse, brown SAND, little silt.
1							End of Boring 0.5 feet
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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Spas Creek Subaqueous Sediments

BORING NUMBER

SED-21-A

PROJECT NAME: Former Chevron Facility Spas Creek

Location: Perth Amboy, New Jersey

PROJECT NO.: 194098.0000.0000

Contractor: NA

DATE DRILLED: **02/28/14**

DRILLER: **NA**

LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Macrocore/1"

WATER DEPTH: 1.5 feet

BORING METHOD: Hand Driven Split Spoon

PENATRATION DEPTH: 0.5 Feet

COORDINATES: X: 622377.3 Y: 555283.1

BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							1.5' Water Column
	6	ND	SED-21-A/0.0-0.5	1	7.5YR 6/6	SW	0 to 0.5' - Fine to coarse, brown SAND, little silt.
1							End of Boring 0.5 feet
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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Spas Creek Subaqueous Sediments

BORING NUMBER

SED-21-C

PROJECT NAME: Former Chevron Facility Spas Creek

Location: Perth Amboy, New Jersey

PROJECT NO.: 194098.0000.0000

Contractor: NA

DATE DRILLED: **02/28/14**

DRILLER: **NA**

LOGGED BY: **J. Lenhart**

SAMPLER TYPE/DIA.: Macrocore/1"

WATER DEPTH: 1.5 feet

BORING METHOD: Hand Driven Split Spoon

PENATRATION DEPTH: 0.5 Feet

COORDINATES: X: 622377.3 Y: 555283.1

BOTTOM TYPE: Mud

DEPTH FROM SEDIMENT SURFACE (FEET)	RECOVERY (INCHES)	PID (ppm)	SAMPLE DESIGNATION	HORIZON #	SED. COLOR (MUN.)	UNIFIED	LITHOLOGIC CLASSIFICATION AND COMMENTS
0							1.5' Water Column
	6	ND	SED-21-C/0.0-0.5	1	7.5YR 6/6	SW	0 to 0.5' - Fine to coarse, brown SAND, little silt.
1							End of Boring 0.5 feet
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							