Table 17. Subsurface Soil Sample
Former

COPC	CAS Number	No. Samples	No. Detects	Frequency of Detection	Maximum Concentration (mg/kg)	Mean Concentration[1] (mg/kg)	95% UCL[2]	Na Back (m
								VOLATILE C
1,2,4-TRICHLOROBENZENE	120-82-1	37	2	5%	0.120	0.008	NE	
2-BUTANONE	78-93-3	37	4	11%	0.130	0.012	NE	
ACETONE	67-64-1	37	31	84%	0.063	0.015	NE	
BENZENE	71-43-2	37	2	5%	0.028	0.004	0.004	
BROMOFORM	75-25-2	37	3	8%	0.024	0.004	NE	
CARBON DISULFIDE	75-15-0	37	2	5%	0.006	0.003	NE	
CIS-1,2-DICHLOROETHENE	156-59-2	37	3	8%	0.012	0.004	NE	
TETRACHLOROETHENE	127-18-4	37	6	16%	0.0064	0.003	0.004	
TOLUENE	108-88-3	37	4	11%	0.038	0.004	NE	
TRICHLOROETHENE	79-01-6	37	5	14%	0.14	0.008	0.008	
XYLENES (TOTAL)[8]	1330-20-7	37	4	11%	0.022	0.007	NE	
								SEMIVOLATIL
2,4-DINITROTOLUENE	121-14-2	37	1	3%	0.600	1.027	1.087	
2,6-DINITROTOLUENE	606-20-2	37	1	3%	0.810	0.222	0.245	
2-METHYLNAPHTHALENE[9]	91-57-6	37	8	22%	1.700	0.267	NE	
3- & 4-METHYLPHENOL	NL	37	1	3%	0.240	0.386	NE	
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	37	3	8%	3.000	0.301	NE	
CARBAZOLE	86-74-8	37	6	16%	1.600	0.270	0.328	
DIBENZOFURAN	132-64-9	37	6	16%	2.400	0.324	NE	
DIETHYLPHTHALATE	84-66-2	37	1	3%	0.230	0.204	NE	
DIMETHYLPHTHALATE	131-11-3	37	1	3%	0.230	0.205	NE	
ISOPHORONE	78-59-1	37	2	5%	0.880	0.221	0.250	
N-NITROSODI-N-PROPYLAMINE	621-64-7	37	1	3%	0.420	0.411	0.680	
								POLYNUCLEAR A
ACENAPHTHENE	83-32-9	37	3	8%	1.300	0.232	NE	
ACENAPHTHYLENE[10]	208-96-8	37	3	8%	3.300	0.284	NE	
ANTHRACENE	120-12-7	37	11	30%	4.600	0.483	NE	
BENZO(A)ANTHRACENE	56-55-3	37	10	27%	4.200	0.455	0.549	
BENZO(A)PYRENE	50-32-8	37	8	22%	2.300	0.348	0.428	
BENZO(B)FLUORANTHENE	205-99-2	37	9	24%	3.200	0.392	0.486	
BENZO(G,H,I)PERYLENE[10]	191-24-2	37	6	16%	1.000	0.255	NE	
BENZO(K)FLUORANTHENE	207-08-9	37	7	19%	1.5	0.267	NE	
CHRYSENE	218-01-9	37	10	27%	2.900	0.381	NE	
DIBENZO(A,H)ANTHRACENE	53-70-3	37	2	5%	0.350	0.405	0.420	
FLUORANTHENE	206-44-0	37	12	32%	12.000	1.027	NE	
FLUORENE	86-73-7	37	6	16%	4.600	0.404	NE	
INDENO(1,2,3-CD)PYRENE	193-39-5	37	6	16%	1.200	0.435	0.508	
NAPHTHALENE	91-20-3	37	7	19%	2.800	0.288	0.335	
PHENANTHRENE[10]	85-01-8	37	11	30%	13.000	1.189	NE	
PYRENE	129-00-0	37	13	35%	5.700	0.639	NE	

Table 17. Subsurface Soil Sample
Former

COPC	CAS Number	No. Samples	No. Detects	Frequency of Detection	Maximum Concentration (mg/kg)	Mean Concentration[1] (mg/kg)	95% UCL[2]	Na Back (m
ALUMINUM	7429-90-5	37	37	100%	36000.000	6497.297	NE	833
ANTIMONY	7440-36-0	37	2	5%	4.300	1.074	NE	
ARSENIC	7440-38-2	37	37	100%	320.000	19.776	22.866	**1**
BARIUM	7440-39-3	37	37	100%	390.000	60.568	NE	5
BERYLLIUM	7440-41-7	37	37	100%	1.400	0.515	NE	
CADMIUM	7440-43-9	37	36	97%	1.700	0.408	NE	
CALCIUM	7440-70-2	37	37	100%	84000.000	6624.595	11486.085	**31**
CHROMIUM[11]	7440-47-3	37	37	100%	20.000	8.835	NE	7
COBALT	7440-48-4	37	37	100%	20.000	7.743	NE	2
COPPER	7440-50-8	37	37	100%	42.000	12.954	17.107	3
CYANIDE	NE	37	2	5%	0.420	0.079	NE	
IRON	7439-89-6	37	37	100%	110000.000	19075.676	23427.190	59
LEAD	7439-92-1	37	37	100%	120.000	20.438	27.887	**2**
MAGNESIUM	7439-95-4	37	37	100%	3100.000	982.703	NE	58
MANGANESE	7439-96-5	37	37	100%	860.000	307.973	NE	15
MERCURY, TOTAL	7439-97-6	37	6	16%	5.000	0.257	0.241	
NICKEL	7440-02-0	37	37	100%	17.000	9.876	NE	3
POTASSIUM	7440-09-7	37	37	100%	3000.000	611.081	NE	19
SELENIUM	7782-49-2	37	24	65%	5.800	1.198	NE	
SODIUM	7440-23-5	37	16	43%	33000.000	1391.528	1213.714	82
THALLIUM	7440-28-0	37	2	5%	6.300	1.091	1.256	
VANADIUM	7440-62-2	37	37	100%	18.000	12.303	NE	1
ZINC	7440-66-6	37	37	100%	95.000	41.730	NE	9

NOTES:

CAS =Chemical Abstract Service
COC = Contaminant of Concern
COPC = Contaminant of Potential Concern
LOD = Level of Detection
mg/kg = milligram per kilogram
NE = Not Established
NL = Not Listed
NOC = Not Of Concern
VRRA = Voluntary Remediation and Redevelopment Act
1 = One-half the detection level was inserted to calculate mean concentrations if analyte was not detected above the LOD.
2 = Refer to Tables for 95% Upper Confidence Limit (UCL) calculations.
3 = Natural background calculated plus two standard deviations per the WV VRRA Guidance manual Table 2-3 and Appendix B.
4 = Values calculated using Johnson and Ettinger Model for Subsurface Vapor Intrusions into Buildings.
5 = Soil: Industrial and Commercial Generic Cleanup Criteria and Screening Levels, Table 3, Part 201, Environmental Remediation, Michigan Natural Resources and Er
6 = Migration to Groundwater values obtained from VRRA Guidance Manual.
7 = Risk-Based values obtained from VRRA Guidance Manual.
8 = Johnson-Ettinger Model - Soil RBCs for total xylene have not been established. This assessment uses the RBCs for m-Xylenel in soil as the reference standard for t
9 = The value for naphthalene was used to evaluate 2-methylnaphthalene per WVDEP.
10 = Risk-based values obtained from WVDEP Supplemental Guidance on Polynuclear Aromatic Hydrocarbons (October 2002).
11 = RBCs for total chromium in soil have not been established. This assessment uses the RBCs for chromium VI in soil as the reference standard for total chromium.
Highlighted and bolded entries indicate that the maximum concentration or 95% UCL exceeds a screening value.