

received 10/27/2014
 Project 8740
 DOC 2142491
 Pit Facility 286531
 E&P waste Facility
 292833

Pond D Soil Analytical Results

Table 910-1

		Pond D Soil Quality Data (same units as in Table 910-1)				
<u>Contaminant of Concern</u>	<u>Concentration</u>	<u>D Center</u>	<u>D North</u>	<u>D East</u>	<u>D South</u>	<u>D West</u>
Organic Compounds in Soil						
TPH (total volatile and extractable petroleum hydrocarbons)	500 mg/kg	70	23	40	27	21
Benzene	0.17 mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	85 mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	100 mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes (total)	175 mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Acenaphthene	1,000, mg/kg					
Anthracene	1,000 mg/kg					
Benzo(A)anthracene	0.22 mg/kg					
Benzo(B)fluoranthene	0.22 mg/kg					
Benzo(K)fluoranthene	2.2 mg/kg					
Benzo(A)pyrene	0.022 mg/kg					
Chrysene	22 mg/kg					
Dibenzo(A,H)anthracene	0.022 mg/kg					
Fluoranthene	1,000 mg/kg					
Fluorene	1,000 mg/kg					
Indeno(1,2,3,C,D)pyrene	0.22 mg/kg					
Naphthalene	23 mg/kg					
Pyrene	1,000 mg/kg					
Organic Compounds in Ground Water						
Benzene	5 µg/l					
Toluene	560 to 1,000 µg/l					
Ethylbenzene	700 µg/l					
Xylenes (total)	1,400 - 10,000 µg/l					
Inorganics in Soils						
Electrical Conductivity (EC)	<4 mmhos/cm or 2x background	0.466	0.420	0.563	0.515	0.373
Sodium Adsorption Ratio (SAR)	<12	1.8	0.13	2	0.15	0.14
pH	6-9	6.8	6.5	6.8	7.2	6.3

Inorganics in Ground Water						
Total Dissolved Solids (TDS)	<1.25 x background					
Chloride	<1.25 x background					
Sulfate	<1.25 x background					
Metals in Soils						
Arsenic	0.39 mg/kg	3.1	3.1	2.3	3.2	3.1
Barium	15,000 mg/kg	275	276	288	206	278
Boron	2 mg/l	3	4	4	3	4
Cadmium	70 mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chromium (III)	120,000 mg/kg	17	12	17	20	12
Chromium (VI)	23 mg/kg	< 1.55	< 1.18	< 1.18	< 1.15	< 1.15
Copper	3,100 mg/kg	28	21	28	25	22
Lead (inorganic)	400 mg/kg	17	16	16	15	16
Mercury	23 mg/kg	0.0398	0.0277	0.0366	0.0031	0.0285
Nickel	1,600 mg/kg	19.1	12.4	16.1	16.2	11.9
Selenium	390 mg/kg	< 5	< 5	< 5	< 5	< 5
Silver	390 mg/kg	<1	<1	<1	<1	<1
Zinc	23,000 mg/kg	83	70	82	71	73
Liquid Hydrocarbons in Soils and Ground Water						
Liquid hydrocarbons including condensate and oil	Below detection level	ND	ND	ND	ND	ND

ND - not detected through visual inspection.