

Koch_Tank Battery (483548), Remediation No. 25978																											
Organic Compounds in Soil		Benzene	Toluene	Ethylbenzene	Xylenes, total	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Pyrene	Diesel Range Organics (C10-C28)	Residual Range Organics (C10-C28)	Gasoline Range Organics (C28-C40)	TPH	
Protection of Groundwater Soil Screening Level Concentrations		0.0026	0.69	0.78	9.9	0.0081	0.0087	0.55	5.8	0.011	0.3	2.9	0.24	9	0.096	8.9	0.54	0.98	0.006	0.019	0.0038	1.3	500	500	500	500	
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Sample ID w/ sample depth	Sample Date																										
SOURCE SAMPLE	12/06/2022	<0.002	0.0041	0.0053	0.0209	1.03	0.0732	0.0292	0.0057	0.0058	<0.0029	<0.0022	<0.0023	0.0245	<0.0031	0.0075	0.0603	<0.0031	0.125	0.0852	0.0183	0.0147	451	136	349	936	
SS-1@2'	12/05/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0038	NA	165	372	<0.2	537		
SS-1@3'	01/27/2023	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0125	0.0478	0.091	0.079	0.0313	0.101	0.0999	0.0225	0.159	0.0144	0.1	0.0027	0.003	<0.002	0.131	31.3	152	<0.2	183.3	
SS-1@3'	02/15/2024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02	0.02	0.044	0.026	<0.02	0.032	0.04	<0.02	0.1	<0.02	<0.02	<0.002	<0.002	<0.002	0.081	<25	<100	<0.2	<125.2	
SS-2@5'	12/06/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0038	NA	<25	<100	<0.2	<125.2	
SS-4@5'	12/06/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0038	NA	28.3	<100	<0.2	28.3	
SS-6@5'	12/06/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0038	NA	<25	<100	<0.2	<125.2	
BH-1@6' *	12/05/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	<0.0025	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	0.0015	<0.0031	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
BH-2@6' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	0.0091	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	<0.0014	<0.0031	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
BH-3@6' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	<0.0006	<0.0004	<0.0005	<0.0006	<0.0006	<0.0004	0.0005	<0.0006	<0.0011	<0.0019	<0.0015	<0.0006	<25	<100	<0.2	<125.2	
BH-4@6' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	<0.0025	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	0.0015	<0.0031	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
BH-5@6' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	0.0022	<0.002	<0.0015	<0.0017	<0.0025	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	0.0044	<0.0031	0.0072	0.0111	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
SW-1@4' *	12/05/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	<0.0025	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	<0.0014	<0.0031	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
SW-4@4' *	12/05/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	0.0053	0.0044	0.0023	0.0048	0.0071	0.0007	0.0077	<0.0003	0.0024	<0.0011	<0.0019	<0.0015	0.0076	25.2	<100	<0.2	25.2	
SW-5@4' *	12/09/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	0.0006	<0.0004	0.0006	0.0007	<0.0006	0.0008	<0.0003	<0.0006	<0.0011	<0.0019	<0.0015	0.0009	<25	<100	<0.2	<125.2	
SW-6@3' *	12/09/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	<0.0006	<0.0004	<0.0005	<0.0006	<0.0006	<0.0004	<0.0003	<0.0006	<0.0011	<0.0019	<0.0015	<0.0006	<25	<100	<0.2	<125.2	
SW-7@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	<0.0025	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	<0.0014	<0.0031	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
SW-8@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	<0.0006	<0.0004	<0.0005	<0.0006	<0.0006	<0.0004	<0.0003	<0.0006	<0.0011	<0.0019	<0.0015	<0.0006	<25	<100	<0.2	<125.2	
SW-9@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	<0.0006	<0.0004	<0.0005	<0.0006	<0.0006	<0.0004	<0.0003	<0.0006	<0.0011	<0.0019	<0.0015	<0.0006	<25	<100	<0.2	<125.2	
SW-10@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	0.0008	<0.0004	<0.0005	<0.0006	<0.0006	<0.0004	<0.0003	<0.0006	<0.0011	<0.0019	<0.0015	<0.0006	<25	<100	<0.2	<125.2	
SW-11@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	<0.0025	<0.0029	<0.0022	<0.0023	<0.0031	<0.0031	<0.002	<0.0014	<0.0031	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
SW-12@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	0.0006	0.0024	<0.0004	0.0013	0.0011	<0.0006	<0.0004	<0.0003	0.0028	<0.0011	<0.0019	<0.0015	0.0017	<25	<100	<0.2	<125.2	
SW-13@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	<0.0005	<0.0006	<0.0004	<0.0005	<0.0006	<0.0006	<0.0004	<0.0003	<0.0006	<0.0011	<0.0019	<0.0015	<0.0006	<25	<100	<0.2	<125.2	
SW-14@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0003	<0.0003	0.0013	0.0024	0.0014	0.002	0.0029	0.0036	0.0006	<0.0003	0.0051	<0.0011	<0.0019	<0.0015	0.0008	<25	<100	<0.2	<125.2	
SW-15@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	<0.0025	0.0032	<0.0022	<0.0023	<0.0031	<0.0031	0.0028	<0.0014	0.0032	<0.0055	<0.0097	<0.0073	<0.0032	<25	<100	<0.2	<125.2	
SW-16@4' *	12/20/2022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0015	<0.0017	0.0028	0.0042	<0.0022	0.0032	<0.0031	<0.0031	0.0032	<0.0014	<0.0031	<0.0055	<0.0097	<0.0073	0.0045	<25	<100	<0.2	<125.2	
SW-17@4'	02/15/2024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02	<0.02	<0.005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.002	<0.002	<0.002	<0.02	<25	<100	<0.2	<125.2	
SW-18@4'	02/15/2024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02	<0.02	<0.005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.002	<0.002	<0.002	<0.02	<25	<100	<0.2	<125.2	
SW-19@4'	02/15/2024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02	<0.02	<0.005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.002	<0.002	<0.002	<0.02	<25	<100	<0.2	<125.2	

**Note

• mg/Kg = milligrams per kilogram

• < = less than the stated laboratory method detection limit

• Screening levels derived from Energy and Carbon Management Commission Table 915-1

• TPH = Total Petroleum Hydrocarbons

• NA = Not Analyzed

• Red Text: exceeds table 915-1 concentration

• Green highlights indicate soil has been excavated

• *Minimum Detection Limit used instead of Reporting Limit

• Bold indicates Minimum Detection Limit is greater than Table 915-1 level

Koch_Tank Battery (483548), Remediation No. 25978

Metals in Soil		Arsenic	Barium	Cadmium	Chromium, Hexavalent	Copper	Lead	Nickel	Selenium	Silver	Zinc
Protection of Groundwater Soil Screening Level Concentrations		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Established Site-Specific Background Concentrations		7.59	248	0.58	--	48	50	--	0.34	--	--
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample ID w/ sample depth	Sample Date										
SOURCE SAMPLE	12/06/2022	2.76	72.1	0.124	<0.244	<9.09	<9.09	<9.09	0.107	<0.0909	<90.9
SS-1@3'	01/27/2023	2.49	72.6	0.175	<2.6	<9.63	<9.63	<9.63	0.255	<0.0963	<96.3
SS-1@3'	02/15/2024	4	68.5	0.122	<0.244	<9.84	8.64	9.35	0.216	<0.0984	37.6
BH-1@6'	12/05/2022	2.04	107	0.102	<0.502	<9.38	<9.38	<9.38	<0.0938	<0.0938	<93.8
BH-2@6'	12/20/2022	1.95	92.3	0.0983	<0.488	<9.36	<9.36	<9.36	<0.0936	<0.0936	<93.6
BH-3@6'	12/20/2022	2.98	90.7	0.106	<0.251	9.73	<9.59	9.74	0.107	<0.0959	<95.9
BH-4@6'	12/20/2022	2.71	75.7	0.118	<0.488	<9.49	<9.49	<9.49	0.161	<0.0949	<94.9
BH-5@6'	12/20/2022	2.51	76.7	0.0971	<0.492	<9.16	<9.16	<9.16	0.166	<0.0916	<91.6
SW-1@4'	12/05/2022	27.8	176	0.209	<0.246	<9.74	29.5	<9.74	0.143	<0.0974	<97.4
SW-4@4'	12/05/2022	1.41	78.6	<0.0926	<0.488	<9.26	<9.26	<9.26	0.1	<0.0926	<92.6
SW-5@4'	12/09/2022	2.77	98.1	0.166	<1.22	<9.85	<9.85	<9.85	0.133	<0.0985	<98.5
SW-6@3'	12/09/2022	3.71	115	0.226	<1.22	10.6	<9.24	10.2	0.267	<0.0924	<92.4
SW-7@4'	12/20/2022	1.93	46.4	<0.0879	<0.488	<8.79	<8.79	<8.79	0.151	<0.0879	<87.9
SW-8@4'	12/20/2022	3.95	104	0.216	<0.488	11	12.2	12.4	0.307	<0.0968	<96.8
SW-9@4'	12/20/2022	3.93	108	0.129	<0.244	10.7	9.17	12	0.162	<0.0915	<91.5
SW-10@4'	12/20/2022	3.62	97	0.188	<1.24	10.7	10.1	11.6	0.232	<0.092	<92
SW-11@4'	12/20/2022	2.54	67.4	0.103	<1.22	<9.66	<9.66	<9.66	0.105	<0.0966	<96.6
SW-12@4'	12/20/2022	4.29	96.2	0.252	<2.44	11.6	15	11.7	0.453	<0.0978	<97.8
SW-13@4'	12/20/2022	2.06	45.9	<0.0947	<1.22	<9.47	<9.47	<9.47	0.168	<0.0947	<94.7
SW-14@4'	12/20/2022	1.65	76.4	<0.0961	<0.25	<9.61	<9.61	<9.61	0.159	<0.0961	<96.1
SW-15@4'	12/20/2022	2.15	62.7	0.101	<0.492	<9.64	<9.64	<9.64	0.187	<0.0964	<96.4
SW-16@4'	12/20/2022	2.48	102	0.133	<0.507	<9.62	<9.62	<9.62	0.141	<0.0962	<96.2

Metals in Soil		Arsenic	Barium	Cadmium	Chromium, Hexavalent	Copper	Lead	Nickel	Selenium	Silver	Zinc
Protection of Groundwater Soil Screening Level Concentrations		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Established Site-Specific Background Concentrations		7.59	248	0.58	--	48	50	--	0.34	--	--
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample ID w/ sample depth	Sample Date										
SW-17@4'	02/15/2024	3.95	112	0.239	<0.244	10.9	8.82	11.8	0.23	<0.0877	43.9
SW-18@4'	02/15/2024	4.76	79.5	0.126	<0.244	9.79	8.08	11.6	0.185	<0.0906	39.4
SW-19@4'	02/15/2024	4.16	83.4	0.219	<0.244	10.2	9.82	11	0.249	<0.0923	42.8

****Note**

- mg/Kg = milligrams per kilogram
- < = less than the stated laboratory method detection limit
- Screening levels derived from Energy and Carbon Management Commission Table 915-1
- Red Text: exceeds table 915-1 concentration
- Green highlights indicate soil has been excavated

Koch_Tank Battery (483548), Remediation No. 25978

Soil Suitability for Reclamation		Specific Conductance (EC)	SAR	pH	Boron
Table 915-1 Concentration		4	6	6-8.3	2
Established Site-Specific Background Concentrations		13.4	17.7	8.6	2.06
Units		mmhos/cm		pHUnits	mg/L
Sample ID w/ sample depth	Sample Date				
SOURCE SAMPLE	12/06/2022	0.862	9.08	8.3	0.668
SS-1@2'	12/05/2022	0.351	0.461	8.2	0.132
SS-1@3'	02/15/2024	0.34	0.191	8.32	0.165
SS-1@3'	01/27/2023	0.409	0.348	8.12	<0.0997
SS-2@5'	12/06/2022	0.376	0.938	7.99	0.298
SS-4@5'	12/06/2022	0.594	0.462	8.24	0.234
SS-6@5'	12/06/2022	1.83	6.13	8.55	1.04
BH-1@6'	12/05/2022	0.854	19.9	8.82	0.547
BH-2@6'	12/20/2022	0.63	3.24	8.3	0.431
BH-3@6'	12/20/2022	0.771	2.61	8.27	0.266
BH-4@6'	12/20/2022	1.02	2.24	8.11	0.283
BH-5@6'	12/20/2022	1.04	2.19	8.12	0.331
SW-1@4'	12/05/2022	0.313	3.51	7.65	0.122
SW-4@4'	12/05/2022	0.527	14.4	8.62	0.32
SW-5@4'	12/09/2022	0.409	0.753	8.16	0.607
SW-6@3'	12/09/2022	0.359	0.643	8.22	0.176
SW-7@4'	12/20/2022	0.226	0.852	8.11	0.122
SW-8@4'	12/20/2022	0.965	4.1	8.56	1.22
SW-9@4'	12/20/2022	0.665	2.07	8.37	<0.999
SW-10@4'	12/20/2022	0.639	1.99	8.39	0.448
SW-11@4'	12/20/2022	1.98	15.5	8.6	0.771
SW-12@4'	12/20/2022	0.635	1.67	8.33	0.588
SW-13@4'	12/20/2022	0.459	1.39	8.22	0.209
SW-14@4'	12/20/2022	0.284	0.347	7.89	0.121
SW-15@4'	12/20/2022	0.647	15.2	8.47	0.425
SW-16@4'	12/20/2022	0.469	0.938	8.11	0.408
SW-17@4'	02/15/2024	0.654	1.8	8.28	0.123
SW-18@4'	02/15/2024	0.798	4.22	8.46	0.321
SW-19@4'	02/15/2024	0.579	3.43	8.25	0.914

**Note

- mmhos/cm = millimhos per centimeter
- < = less than the stated laboratory method detection limit
- mg/L = milligrams per liter
- SAR = Sodium Adsorption Ratio
- Red Text: exceeds table 915-1 concentration
- Green highlights indicate soil has been excavated

Koch Tank Battery (483548), Remediation No. 25978

Soil Field Screening

Sample ID	Depth (ft)	Date	PID (ppm)	Latitude	Longitude
FS-4	3	12/13/2022	0	40.07951	-105.03761
FS-5	3	12/13/2022	5.7	40.0795	-105.03757
FS-6	3	12/13/2022	0.2	40.0795	-105.03755
FS-7	4	12/15/2022	0	40.07962	-105.03755
FS-8	4	12/15/2022	0.2	40.07958	-105.03753
FS-9	4	12/15/2022	0	40.07953	-105.03751
FS-10	4	12/15/2022	0	40.07951	-105.03751
FS-11	4	12/15/2022	0	40.07948	-105.03756
FS-12	5	12/15/2022	0	40.07952	-105.03757
SS-1	3	1/27/2023	0.9	NC	NC
SS-1	3	2/15/2024	11.7	40.0800307	-105.0376783
SS-2	5	12/6/2022	0.5	40.07997	-105.03761
SS-3	5	12/6/2022	0.1	40.07990	-105.03765
SS-4	5	12/6/2022	0.1	40.07984	-105.03763
SS-5	5	12/6/2022	0.2	40.07976	-105.03761
SS-6	5	12/6/2022	0.2	40.07968	-105.03759
BH-1	6	12/5/2022	8.1	40.07961	-105.03761
BH-2	6	12/20/2022	1	40.07963	-105.03761
BH-3	6	12/20/2022	0.7	40.07962	-105.03758
BH-4	6	12/20/2022	0.4	40.07953	-105.03756
BH-5	6	12/20/2022	0.5	40.07952	-105.0376
SW-1	4	12/5/2022	0.1	40.07962	-105.03761
SW-2	4	12/5/2022	135.4	40.07959	-105.03757
SW-3	4	12/5/2022	124.1	40.07956	-105.0376
SW-4	4	12/5/2022	1.5	40.07959	-105.03764
SW-5	4	12/9/2022	0.3	40.07964	-105.03764
SW-6	3	12/9/2022	0.2	40.07965	-105.03763
SW-7	4	12/20/2022	1.1	40.07965	-105.03764
SW-8	4	12/20/2022	0.9	40.07966	-105.03756
SW-9	4	12/20/2022	0.3	40.07963	-105.03757
SW-10	4	12/20/2022	0.1	40.07959	-105.03754
SW-11	4	12/20/2022	0.9	40.07952	-105.03781
SW-12	4	12/20/2022	0.8	40.0795	-105.03757
SW-13	4	12/20/2022	0.4	40.0795	-105.03758
SW-14	4	12/20/2022	0.2	40.07955	-105.03763
SW-15	4	12/20/2022	0.2	40.07958	-105.03764
SW-16	4	12/20/2022	0.8	40.07961	-105.03765
SW-17	4	2/15/2024	4.9	40.0795038	-105.0375120
SW-18	4	2/15/2024	9.7	40.079561	-105.037479
SW-19	4	2/15/2024	7.6	40.079570	-105.037608

Notes:

Latitude and longitude values from field notes
 PID - photoionization detector
 ft - feet

ppm - parts per million
 NC - not collected

Koch_Tank Battery (483548), Remediation No. 25978

Groundwater		Benzene	Toluene	Ethylbenzene	Xylenes (total)	Total Dissolved Solids	Chloride	Sulfate
ECMC Table 915-1 Concentration Levels		5	560	700	1400		250	250
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L
Sample	Sample Date							
GW-1	12/5/2022	<1.00	<1.00	1.20	6.59	3060	845	409

**Note

- µg/L = micrograms per liter
- < = less than the stated laboratory method detection limit
- mg/L = milligrams per liter
- Red Text: exceeds table 915-1 concentration