

Table 1
Hawxhurst 24-09 Spill Response
Soil Sample Summary

LABORATORY DATA SUMMARY										
Sample ID	HAWX 24-09 SS1	HAWX 24-09 SS2	HAWX 24-09 E SW SS1	HAWX 24-09 BH SS2	HAWX 24-09 N SW SS3	HAWX 24-09 S SW SS4	HAWX 24-09 W SW SS5	HAWX 24-09 BG1	COGCC TABLE 910-1 CONCENTRATION LEVELS	UNITS
Sample Depth	0-6"	0-6"	4.5'	7.5'	6.5'	4.5'	4'	1'		
Longitude N	39.25941	39.259387	39.259377	39.25943	39.259377	39.25931	39.259349	39.25905		
Latitude W	-107.93585	-107.935812	-107.93576	-107.93586	-107.93576	-107.935765	-107.93581	-107.93679		
Sample Type	Grab	Grab	Grab- confirmation	Grab- Confirmation	Grab-Confirmation	Grab- Confirmation	Grab-Confirmation	Grab		
Sample Date	8/22/19	8/22/19	8/23/19	8/23/19	8/23/19	8/23/19	8/23/19	8/22/19		
Sample Description	Approximate origin Surface	Approximate Terminal Surface	East Side Wall	Bottom Hole- Below Pipeline leak	North Side Wall	South Side Wall	West Side Wall	Background sample		
Analytical Parameters										
TPH										
TPH Gasoline Range Organics	1240	3.28	0.234	2.97	0.205	0.457	0.15	NT	500	mg/kg
TPH Diesel Range Organics	11000	187	4.26	72.4	ND	9.78	11.8	NT		
BTEX										
Benzene	2.76	0.00211	0.000952	0.00146	0.00109	0.000785	0.000822	NT	0.17	mg/kg
Toluene	13.1	0.0155	ND	0.00901	ND	ND	ND	NT	85	mg/kg
Ethylbenzene	3.92	0.0059	ND	ND	ND	ND	ND	NT	100	mg/kg
Total Xylene	77.8	0.109	0.00614	0.0748	0.00672	0.0121	0.00991	NT	175	mg/kg
Metals										
Arsenic	2.44	2.82	2.25	3.13	2.51	2.91	4.52	3.42	0.39	mg/kg
Barium	2260	2830	194	296	178	354	352	NT	15,000	mg/kg
Cadmium	ND	ND	ND	ND	ND	ND	ND	NT	70	mg/kg
Chromium	15.7	17.7	16.4	13.3	16.6	21.8	19.9	NT	NA	mg/kg
Copper	15.60	19.3	12.7	9.81	11.7	13.9	13.0	NT	3,100	mg/kg
Lead	8.13	9.19	8.72	6.54	8.82	9.40	14.50	NT	400	mg/kg
Mercury	ND	ND	ND	ND	ND	ND	ND	NT	23	mg/kg
Nickel	18.8	26	17.3	13	15.6	21.4	40.6	NT	1,600	mg/kg
Selenium	ND	ND	ND	ND	ND	ND	ND	NT	390	mg/kg
Silver	ND	ND	ND	ND	ND	ND	ND	NT	390	mg/kg
Zinc	38.1	46.6	40.6	29.3	38.5	45.7	40.9	NT	23,000	mg/kg
SAR Metals Analysis										
Sodium Adsorption Ratio	65.3	35.6	2.34	27.0	2.25	1.25	1.38	NT	<12	ratio
Polynuclear Aromatic Hyrdrocarbons										
Acenaphthene	0.365	ND	ND	ND	ND	ND	ND	NT	1,000	mg/kg
Anthracene	ND	ND	ND	ND	ND	ND	ND	NT	1,000	mg/kg
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	NT	0.22	mg/kg
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	NT	0.022	mg/kg
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	NT	0.22	mg/kg
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	NT	2.2	mg/kg
Chrysene	ND	ND	ND	ND	ND	ND	ND	NT	22	mg/kg
Dibenzo(a,h)anthracene	0.032	ND	ND	ND	ND	ND	ND	NT	0.022	mg/kg
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	NT	1,000	mg/kg
Fluorene	1.03	ND	ND	0.0175	ND	ND	ND	NT	1,000	mg/kg
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	NT	0.22	mg/kg
Napthalene	7.14	0.0337	0.0762	0.0985	0.0395	0.087	ND	NT	23	mg/kg
Pyrene	0.0106	ND	ND	ND	ND	ND	ND	NT	1,000	mg/kg
General Chemistry										
Chromium, Hexavalent	ND	ND	ND	ND	ND	ND	ND	NT	23	mg/kg
Chromium, Trivalent	15.7	17.7	16.4	13.3	16.6	21.8	19.9	NT	120,000	mg/kg
Specific Conductivity	8.29	6.16	0.647	2.29	0.259	0.317	0.268	NT	<4 or 2 x the background	mmhos/cm
pH	8.29	7.95	8.24	8.22	8.44	8.12	8.33	NT	6-9	su

mg/kg - milligrams per kilogram
mg/L - milligrams per liter
J - indicates an estimated value
mmhos/cm - millimhos per centimeter
mv - millivolts
su - standard units
NA - not applicable
NT - parameter was not tested
ND - not detected above method detection limit

Over COGCC Table 910-1 concentration levels but under BACKGROUND level.
Over COGCC Table 910-1 concentration levels and not within BACKGROUND level.
Over COGCC Table 910-1 concentration levels