

Horsetail 07F-0639 - Cumulative Soil Analytical Summary Table

						Residential Soil Limits	benzene	toluene	ethylbenzene	Xylenes (total)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene
Residential Soil							1.2	490	5.8	58	30	27
ECMC Table 915-1 Concentration Levels							NA	NA	NA	NA	NA	NA
Background *1.25							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sample	Lab Sample ID	Sample Date	Background	Latitude	Longitude	benzene	toluene	ethylbenzene	Xylenes (total)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	
Background-1@1'	Y309139-01	9/6/2023	TRUE	40.85391	-103.79536	NA	NA	NA	NA	NA	NA	
Background-2@1'	Y309139-02	9/6/2023	TRUE	40.85392	-103.79632	NA	NA	NA	NA	NA	NA	
Background-3@1'	Y309139-03	9/6/2023	TRUE	40.85371	-103.79655	NA	NA	NA	NA	NA	NA	
Background-4@1'	Y309139-04	9/6/2023	TRUE	40.85339	-103.79668	NA	NA	NA	NA	NA	NA	
Background-5@1'	Y309139-05	9/6/2023	TRUE	40.85334	-103.79534	NA	NA	NA	NA	NA	NA	
Background-6@3'	2403326-01	3/21/2024	TRUE	40.8535	-103.97538	NA	NA	NA	NA	NA	NA	
Background-6@6'	2403326-02	3/21/2024	TRUE	40.8535	-103.97538	NA	NA	NA	NA	NA	NA	
Background-7@3'	2403326-03	3/21/2024	TRUE	40.85341	-103.79558	NA	NA	NA	NA	NA	NA	
Background-7@6'	2403326-04	3/21/2024	TRUE	40.85341	-103.79558	NA	NA	NA	NA	NA	NA	
Background-8@3'	2403326-05	3/21/2024	TRUE	40.85344	-103.79615	NA	NA	NA	NA	NA	NA	
Background-8@6'	2403326-06	3/21/2024	TRUE	40.85344	-103.79615	NA	NA	NA	NA	NA	NA	
Background-9@3'	2403326-07	3/21/2024	TRUE	40.85348	-103.79661	NA	NA	NA	NA	NA	NA	
Background-9@6'	2403326-08	3/21/2024	TRUE	40.85348	-103.79661	NA	NA	NA	NA	NA	NA	
SW-1@3'	E4K0128-01	11/5/2024	FALSE	40.85356	-103.79599	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-2@3'	E4K0128-02	11/5/2024	FALSE	40.85354	-103.796	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-3@3'	E4K0128-03	11/5/2024	FALSE	40.85349	-103.796	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-4@3'	E4K0128-04	11/5/2024	FALSE	40.85343	-103.796	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-5@3'	E4K01280-05	11/5/2024	FALSE	40.85344	-103.79604	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-6@3'	E4K0128-06	11/5/2024	FALSE	40.85344	-103.7961	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-7@3'	E4K0128-07	11/5/2024	FALSE	40.85346	-103.79617	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-8@3'	E4K0128-08	11/5/2024	FALSE	40.85349	-103.79620	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-9@3'	E4K01280-09	11/5/2024	FALSE	40.85357	-103.79620	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-10@3'	E4K0128-10	11/5/2024	FALSE	40.85336	-103.79618	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-11@3'	E4K0128-11	11/5/2024	FALSE	40.85363	-103.79617	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-12@3'	E4K0128-12	11/5/2024	FALSE	40.85336	-103.79613	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-13@3'	E4K0128-13	11/5/2024	FALSE	40.85336	-103.79607	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
SW-14@3'	E4K0128-14	11/5/2024	FALSE	40.85361	-103.79601	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
BH-1@5'	E4K0128-15	11/5/2024	FALSE	40.85355	-103.79602	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
BH-2@5'	E4K0128-16	11/5/2024	FALSE	40.85358	-103.79607	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
BH-3@5'	E4K0128-17	11/5/2024	FALSE	40.85358	-103.79612	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
BH-4@5'	E4K0128-18	11/5/2024	FALSE	40.85346	-103.79617	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
BH-5@5'	E4K0128-19	11/5/2024	FALSE	40.8535	-103.79611	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
BH-6@6'	E4K0128-20	11/5/2024	FALSE	40.85346	-103.79604	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	

ECMC - Colorado Energy and Carbon Management Commission

ORO - oil range organics (C28-C36)

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

mmhos/cm - millimhos per centimeter

NA - Not Analyzed

NL - Not Listed

TPH - total petroleum hydrocarbons

< - Indicates analytical result is less than the laboratory reporting limit (<RL).

RED font - indicates the sample result exceeds the applicable ECMC Table 915-1 cleanup concentration limit.

Removed Via Excavation

Horsetail 07F-0639												
Residential Soil	benzene	naphthalene	Gasoline Range Hydrocarbons	C10-C28 (DRO)	C28-C36 (ORO)	TPH (Calculated)	acenaphthene	anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene
ECMC Table 915-1 Concentration Levels	2		500	500	500	500	360	1800	1.1	0.11	1.1	11
Background *1.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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
Sample	naphthalene	Gasoline Range Hydrocarbons	C10-C28 (DRO)	C28-C36 (ORO)	TPH (Calculated)	acenaphthene	anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	
Background-1@1'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-2@1'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-3@1'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-4@1'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-5@1'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-6@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-6@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-7@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-7@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-8@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-8@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-9@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Background-9@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SW-1@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-2@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-3@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-4@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-5@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-6@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-7@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-8@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-9@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-10@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-11@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	0.00217	<0.001	<0.001	
SW-12@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-13@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
SW-14@3'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
BH-1@5'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
BH-2@5'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
BH-3@5'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
BH-4@5'	<0.001	0.298	50.8	<100	NA	<0.001	<0.001	0.0072	<0.001	<0.001	<0.001	
BH-5@5'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
BH-6@6'	<0.001	<0.2	<25	<100	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	

ECMC - Colorado Energy and Carbon Manage

ORO - oil range organics (C28-C36)

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

mmhos/cm - millimhos per centimeter

NA - Not Analyzed

NL - Not Listed

TPH - total petroleum hydrocarbons

< - Indicates analytical result is less than the l

RED font - indicates the sample result exceed

Removed Via Excavation

Horsetail 07F-0639												
	benzene	chrysene	Dibenz (a,h) anthracene	fluoranthene	fluorene	Indeno (1,2,3-cd) pyrene	pyrene	1-methylnaphthalene	2-methylnaphthalene	Boron	arsenic	barium
Residential Soil												
ECMC Table 915-1 Concentration Levels	110	0.11	240	240	1.1	180	18	24	2	0.68	15000	
Background *1.25	NA	NA	NA	NA	NA	NA	NA	NA	0.83	8.24	6300	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg dry	mg/kg dry	
Sample	chrysene	Dibenz (a,h) anthracene	fluoranthene	fluorene	Indeno (1,2,3-cd) pyrene	pyrene	1-methylnaphthalene	2-methylnaphthalene	Boron	arsenic	barium	
Background-1@1'	NA	NA	NA	NA	NA	NA	NA	NA	0.155	1.84	639	
Background-2@1'	NA	NA	NA	NA	NA	NA	NA	NA	0.575	8.24	5040	
Background-3@1'	NA	NA	NA	NA	NA	NA	NA	NA	0.148	2.40	196	
Background-4@1'	NA	NA	NA	NA	NA	NA	NA	NA	0.67	2.48	682	
Background-5@1'	NA	NA	NA	NA	NA	NA	NA	NA	<1.00	1.89	216	
Background-6@3'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	2.81	183	
Background-6@6'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	2.54	184	
Background-7@3'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	3.98	1810	
Background-7@6'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	3.22	270	
Background-8@3'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	2.75	208	
Background-8@6'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	3.13	223	
Background-9@3'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	2.07	157	
Background-9@6'	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	2.38	233	
SW-1@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.24	1.76	170	
SW-2@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.26	2.06	270	
SW-3@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.65	2.27	212	
SW-4@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.398	1.58	175	
SW-5@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.275	1.52	122	
SW-6@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.11	1.34	100	
SW-7@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.099	0.88	83.2	
SW-8@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.293	1.76	211	
SW-9@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.933	1.02	60	
SW-10@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.03	1.91	164	
SW-11@3'	0.00217	<0.001	<0.001	<0.001	0.00181	<0.001	<0.001	<0.001	1.55	2.09	282	
SW-12@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.94	2.04	151	
SW-13@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.111	1.35	151	
SW-14@3'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.18	1.27	134	
BH-1@5'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.654	1.95	189	
BH-2@5'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.286	1.56	155	
BH-3@5'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.77	2.05	359	
BH-4@5'	0.00379	<0.001	0.00227	0.00947	<0.001	0.00379	<0.001	<0.001	0.582	2.28	244	
BH-5@5'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.27	1.81	155	
BH-6@6'	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.65	2.09	461	

ECMC – Colorado Energy and Carbon Manage

ORO – oil range organics (C28-C36)

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

mmhos/cm - millimhos per centimeter

NA – Not Analyzed

NL – Not Listed

TPH – total petroleum hydrocarbons

< - Indicates analytical result is less than the l

RED font – indicates the sample result exceed

Removed Via Excavation

Horsetail 07F-0639										
	cadmium	copper	lead	nickel	selenium	silver	zinc	chromium (Hexavalent)	Sodium Adsorption Ratio	Specific Conductance
Residential Soil										
ECMC Table 915-1 Concentration Levels	71	3100	400	1500	390	390	23000	0.3	6	4
Background *1.25	2.6	22.25	<9.49	25.704	4.375	0.16	<94.9	<0.5	4.36	1.01
Units	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg	Units	mmhos/cm
Sample	cadmium	copper	lead	nickel	selenium	silver	zinc	chromium (Hexavalent)	Sodium Adsorption Ratio	Specific Conductance (EC)
Background-1@1'	<0.0911	<9.11	<9.11	<9.11	<0.0911	<0.0911	<91.1	<0.5	2.64	0.611
Background-2@1'	2.08	17.8	<9.18	20.1	3.55	0.128	<91.8	<0.5	4.36	0.909
Background-3@1'	0.185	9.3	<8.88	<8.88	0.228	<0.0888	<88.8	<0.5	1.85	0.775
Background-4@1'	0.163	<9.34	<9.34	<9.34	0.099	<0.0934	<93.4	<0.5	0.509	0.433
Background-5@1'	<0.0949	<9.49	<9.49	<9.49	<0.0949	<0.0949	<94.9	<1	0.188	0.323
Background-6@3'	0.269	4.77	7.48	3.95	<0.260	0.0283	16.8	<0.30	0.523	0.363
Background-6@6'	0.256	4.75	6.23	3.65	<0.260	0.0264	14.5	<0.30	2.22	1.01
Background-7@3'	0.307	5.57	8.27	4.21	0.451	0.0283	19.1	<0.30	0.228	0.281
Background-7@6'	0.303	5.09	7.64	4.21	<0.260	0.0295	17.6	<0.30	0.218	0.229
Background-8@3'	0.27	4.81	6.75	3.62	<0.260	0.0303	17.6	<0.30	0.104	0.157
Background-8@6'	0.311	4.94	7.24	3.8	<0.260	0.0286	17.8	<0.30	0.176	0.226
Background-9@3'	<0.200	3.22	5.33	2.46	<0.260	<0.0200	12	<0.30	0.301	0.296
Background-9@6'	0.235	3.9	6.09	3.07	<0.260	0.0207	14.2	<0.30	0.381	0.287
SW-1@3'	<0.0891	<8.91	8.92	3.62	<0.232	<0.089	<33	<0.140	5.68	0.586
SW-2@3'	0.097	<9.37	5.58	4.83	<0.243	<0.094	<34.7	<0.120	7.5	4.18
SW-3@3'	0.111	<9.61	6.21	5.39	<0.250	<0.096	<35.6	<0.104	13.2	1.99
SW-4@3'	<0.093	<9.34	4.44	3.54	<0.243	<0.093	<34.5	<0.116	3.85	0.589
SW-5@3'	<0.086	<8.56	3.91	2.36	<0.223	<0.086	<31.7	<0.083	4.91	0.68
SW-6@3'	<0.084	<8.38	2.92	1.61	<0.218	<0.084	<31	<0.105	1.88	0.321
SW-7@3'	<0.091	<9.05	2.58	1.47	<0.235	<0.091	<33.5	<0.109	1.46	0.223
SW-8@3'	<0.089	<8.95	4.45	3.52	<0.233	<0.089	<33.1	<0.132	1.93	0.826
SW-9@3'	<0.085	<8.48	3.24	1.96	<0.220	<0.085	<31.4	<0.104	6.59	1.93
SW-10@3'	<0.088	<8.83	5.58	3.65	<0.229	<0.088	<32.7	<0.151	17.6	3.76
SW-11@3'	0.086	<8.47	6.53	4.3	<0.220	<0.085	<31.3	<0.132	19.6	0.904
SW-12@3'	<0.085	<8.52	5.51	4.29	<0.221	<0.085	<31.5	<0.127	6.7	0.585
SW-13@3'	<0.094	<9.39	4.05	2.79	<0.244	<0.094	<34.8	<0.115	1.98	0.261
SW-14@3'	<0.094	<9.43	3.71	3.02	<0.245	<0.094	<34.9	<0.105	1.11	0.238
BH-1@5'	<0.094	<9.41	5.46	4.22	<0.245	<0.094	<34.8	<0.105	11.3	3.65
BH-2@5'	<0.093	<9.34	4.18	3.43	<0.243	<0.093	<34.6	<0.144	10.7	1.54
BH-3@5'	0.106	<8.48	5.42	5.28	<0.220	<0.085	<31.4	<0.141	5.79	2.1
BH-4@5'	0.113	<8.38	6.03	5.43	<0.218	<0.084	<31	<0.130	3.74	1.31
BH-5@5'	<0.097	<9.74	4.58	3.89	<0.253	<0.097	<36	<0.110	13.2	2.71
BH-6@6'	0.151	<9.59	5.88	5.52	<0.249	<0.096	<35.5	<0.154	9.36	2.18

ECMC - Colorado Energy and Carbon Manage

ORO - oil range organics (C28-C36)

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

mmhos/cm - millimhos per centimeter

NA - Not Analyzed

NL - Not Listed

TPH - total petroleum hydrocarbons

< - Indicates analytical result is less than the l

RED font - indicates the sample result exceed

Removed Via Excavation

the mos

Horsetail 07F-0639	
	pH
Residential Soil	
ECMC Table 915-1 Concentration Levels	6 to 8.3
Background *1.25	9.16
Units	pH units
Sample	pH
Background-1@1'	8.33
Background-2@1'	8.27
Background-3@1'	8.06
Background-4@1'	8.07
Background-5@1'	7.84
Background-6@3'	8.72
Background-6@6'	8.16
Background-7@3'	9.08
Background-7@6'	9.16
Background-8@3'	8.93
Background-8@6'	8.68
Background-9@3'	8.78
Background-9@6'	8.81
SW-1@3'	8.87
SW-2@3'	8.03
SW-3@3'	8.49
SW-4@3'	8.56
SW-5@3'	8.67
SW-6@3'	8.84
SW-7@3'	8.91
SW-8@3'	8.28
SW-9@3'	8.25
SW-10@3'	8.3
SW-11@3'	9
SW-12@3'	8.8
SW-13@3'	8.66
SW-14@3'	8.54
BH-1@5'	8.16
BH-2@5'	8.42
BH-3@5'	8.17
BH-4@5'	8.13
BH-5@5'	8.34
BH-6@6'	8.23

ECMC – Colorado Energy and Carbon Manage

ORO – oil range organics (C28-C36)

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

mmhos/cm - millimhos per centimeter

NA – Not Analyzed

NL – Not Listed

TPH – total petroleum hydrocarbons

< - Indicates analytical result is less than the la

RED font – indicates the sample result exceed

Removed Via Excavation