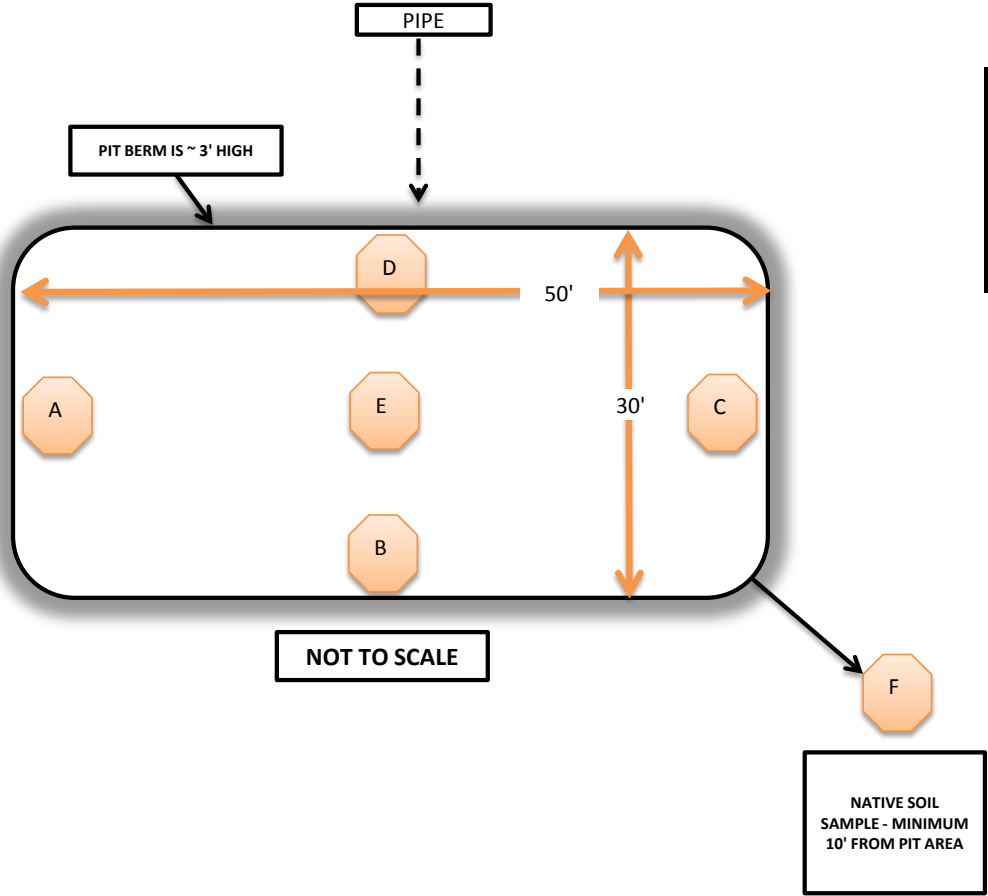


Island Butte II 6
Soil Sample Analysis

REM 9909
API# 083-06539
Document 2527490

Contaminant of Concern	Colorado Oil and Gas Conservation Commission (COGCC) Allowable Levels	Sample Description (mg/kg)					
		A (2')	B (2')	C (2')	D (2')	E (2')	F (2') (OFFSITE/NATIVE)
GPS Coordinates	Latitude	37.531032	37.531025	37.531046	37.531075	37.531003	37.530936
GPS Coordinates	Longitude	-108.939852	-108.939809	-108.939747	-108.939802	-108.939794	-108.939698
TPH (USEPA Method 8015)	500 ppm	72.900	115.800	30.000	37.600	52.700	30.000
Benzene	0.17 ppm	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	85 ppm	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	100 ppm	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Xylenes (total)	175 ppm	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
Acenaphthene	1000 ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Anthracene	1000 ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Benzo(A)anthracene	0.22 ppm	<0.016	<0.016	<0.016	<0.016	0.016	<0.016
Benzo(B)floranthene	0.22 ppm	0.014	<0.003	<0.003	<0.003	<0.003	<0.003
Benzo(K)floranthene	2.2 ppm	0.041	<0.004	<0.004	<0.004	<0.004	<0.004
Benzo(A)pyrene	0.022 ppm	<0.003	<0.003	<0.003	<0.003	0.008	<0.003
Chrysene	22 ppm	0.049	<0.003	<0.003	<0.003	<0.003	<0.003
Dibenzo(A,H)anthracene	0.022 ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Floranthene	1000 ppm	<0.007	<0.007	<0.007	<0.007	0.014	<0.007
Florene	1000 ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Indeno(1,2,3,C,D)pyrene	0.22 ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Naphthalene	23 ppm	<0.002	<0.002	<0.002	<0.002	0.008	0.004
Pyrene	1000 ppm	0.019	<0.003	<0.003	<0.003	<0.003	<0.003
Arsenic	0.39 ppm	2.940	2.790	2.450	2.550	2.220	2.720
Barium	15000 ppm	255.000	2940.000	211.000	483.000	3030.000	169.000
Cadmium	70 ppm	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chromium (III)	120000 ppm	6.610	7.450	7.240	5.230	5.130	6.960
Copper	3100 ppm	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Lead	400 ppm	<10.00	24.000	<10.00	<10.00	<10.00	<10.00
Mercury	23 ppm	<0.112	<0.114	<0.115	<0.110	<0.111	<0.115
Selenium	390 ppm	<20.00	<20.00	<20.00	<20.00	<20.00	<20.00
Silver	390 ppm	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Zinc	23000 ppm	14.700	19.400	15.400	10.700	11.400	15.600
Boron	2 ppm	<0.600	0.901	<0.600	<0.600	<0.600	<0.600
Nickel	1600 ppm	5.430	5.470	5.950	<5.00	<5.00	6.180
Chromium (VI)	23 ppm	6.610	7.450	7.240	5.230	5.130	6.960
pH	6-9	7.300	7.470	7.610	7.550	7.590	7.590
Sodium Adsorption Ratio	<12 ⁵	0.150	0.180	0.070	0.260	0.060	0.180
Electrical Conductivity	<4 mmhos/cm	0.083	1.240	0.504	0.651	0.537	0.555

ISLAND BUTTE II 6 - COLORADO
SOIL SAMPLE DIAGRAM



SAMPLE	TYPE
A	1 DISCRETE SOIL SAMPLE AT 2 FT DEEP ON INSIDE EDGE OF BERM WALL
B	1 DISCRETE SOIL SAMPLE AT 2 FT DEEP ON INSIDE EDGE OF BERM WALL
C	1 DISCRETE SOIL SAMPLE AT 2 FT DEEP ON INSIDE EDGE OF BERM WALL
D	1 DISCRETE SOIL SAMPLE AT 2 FT DEEP ON INSIDE EDGE OF BERM WALL
E	1 DISCRETE SOIL SAMPLE AT 2 FT DEEP FROM CENTER OF PIT
F	1 DISCRETE SOIL SAMPLE AT 2 FT DEEP IN NATIVE SOIL 10' FROM PIT