

Soil Sampling Results
Leroy McCaw B#1
BP America Production Company

Parameter	SS01	SS02	SS03	SS04	COGCC Table 910	Units
Field, PID	1.8	0.8	0.6	0.5	NA	ppm
Conductivity	0.254	3.870	1.770	1.000	<4 or 2x BG	mmhos/cm
pH	6.66	7.29	8.01	5.50	6-9	pH units
SAR	0.39	14.1	19.3	2.80	<12	no units
Calcium	35.5	111	74.7	74.4	NA	mg/L
Magnesium	6.19	17.9	11.7	14.6	NA	mg/L
Sodium	9.46	607	681	101	NA	mg/L
Arsenic	2.64	4.04	3.12	2.48	0.39	mg/kg
Barium	452	275	322	251	15,000	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	70	mg/kg
Chromium	7.17	6.42	6.02	6.25	23	mg/kg
Copper	24.4	22.5	16.3	16.8	3,100	mg/kg
Lead	16.1	11.4	13.2	11.9	400	mg/kg
Nickel	10.6	8.96	7.67	7.95	1,600	mg/kg
Selenium	<20.0	<20.0	<20.0	<20.0	390	mg/kg
Silver	<1.00	<1.00	<1.00	<1.00	390	mg/kg
Zinc	55.2	50.5	55.6	51.2	23,000	mg/kg
Mercury	<0.0496	<0.0553	<0.0660	<0.0651	23	mg/kg
Boron	<1.20	2.18	<1.20	<1.20	2	mg/L
Benzene	<0.050	<0.050	<0.050	<0.050	0.17	mg/kg
Toluene	<0.050	<0.050	<0.050	<0.050	85	mg/kg
Ethylbenzene	<0.050	<0.050	<0.050	<0.050	100	mg/kg
Total Xylenes	<0.150	<0.150	<0.150	<0.150	175	mg/kg
Total BTEX	<0.300	<0.300	<0.300	<0.300	NA	mg/kg
TPH (GRO)	<10.0	<10.0	<10.0	<10.0	NA	mg/kg
TPH (DRO)	<10.0	<10.0	<10.0	<10.0	NA	mg/kg
TPH (EXT DRO)	<10.0	<10.0	<10.0	<10.0	NA	mg/kg
Total TPH	<30.0	<30.0	<30.0	<30.0	500	mg/kg
Naphthalene	<0.014	<0.014	<0.014	<0.014	23	mg/kg
Acenaphthene	<0.007	<0.007	<0.007	<0.007	1,000	mg/kg
Fluorene	<0.006	<0.006	<0.006	<0.006	1,000	mg/kg
Anthracene	<0.008	<0.008	<0.008	<0.008	1,000	mg/kg
Fluoranthene	<0.006	<0.006	<0.006	<0.006	1,000	mg/kg
Pyrene	<0.007	<0.007	<0.007	<0.007	1,000	mg/kg
Benzo(a)anthracene	<0.008	<0.008	<0.008	0.009	0.22	mg/kg
Chrysene	<0.010	<0.010	<0.010	<0.010	22	mg/kg
Benzo(b)fluoranthene	<0.009	<0.009	<0.009	<0.009	0.22	mg/kg
Benzo(k)fluoranthene	<0.010	<0.010	<0.010	<0.010	2.2	mg/kg
Benzo(a)pyrene	<0.007	<0.007	<0.007	<0.007	0.022	mg/kg
Indeno(1,2,3-cd)pyrene	<0.010	<0.010	<0.010	<0.010	0.22	mg/kg
Dibenz(a,h)anthracene	<0.006	<0.006	<0.006	<0.006	0.022	mg/kg

Notes: SS01, SS02, SS03, and SS04 collected 4/2/19. SS01 collected as a background sample.

ppm - parts per million

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

mmhos/cm - millihos per centimeter

PID - Photoionization Detector

SAR - Sodium Adsorption Ratio

COGCC- Colorado Oil & Gas Conservation Commission

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

BG - Background

NA - Not Applicable