

**Soil Sampling Results**  
**Simms E #1 & #3**  
**BP America Production**

Parameter	SS01 11/6/2020 Point of release	SS02 11/6/2020 Wet area	SS03 11/6/2020 Wet area	SS04 11/6/2020 Background	COGCC Table 910 Standard	Units
Depth	0-6	0-6	0-6	0-6	NA	inches bgs
Field, PID	3.9	10.6	24.4	18.8	NA	ppm
Conductivity	2.120	3.650	3.780	0.311	<4 or 2x BG	mmhos/cm
pH	7.86	7.81	8.04	6.52	6-9	pH units
SAR	<b>12.0</b>	6.52	<b>16.5</b>	0.43	<12	no units
Calcium	41.1	230	72.3	43.8	NA	mg/L
Magnesium	10.6	45.2	12.9	8.46	NA	mg/L
Sodium	333	413	580	12.0	NA	mg/L
Arsenic	<b>2.03</b>	<b>2.59</b>	<b>2.51</b>	<b>1.64</b>	0.39	mg/kg
Barium	405	588	525	388	15,000	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	70	mg/kg
Total Chromium	9.03	9.07	8.35	10.3	23 or 120,000*	mg/kg
Copper	15.5	14.1	14.2	11.4	3,100	mg/kg
Lead	<10.0	<10.0	<10.0	14.1	400	mg/kg
Nickel	9.89	8.02	8.47	11.2	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	42.6	33.5	41.1	51.3	23,000	mg/kg
Mercury	<0.0460	<0.0440	<0.0549	<0.0431	23	mg/kg
Boron	<1.20	<1.20	<1.20	<1.20	2	mg/L
Benzene	<0.050	<0.050	<0.050	-	0.17	mg/kg
Toluene	<0.050	<0.050	<0.050	-	85	mg/kg
Ethylbenzene	<0.050	<0.050	<0.050	-	100	mg/kg
Total Xylenes	<0.150	<0.150	<0.150	-	175	mg/kg
Total BTEX	<0.300	<0.300	<0.300	-	NA	mg/kg
TPH (GRO)	<10.0	<10.0	<10.0	-	NA	mg/kg
TPH (DRO)	<10.0	<10.0	<10.0	-	NA	mg/kg
TPH (EXT DRO)	<10.0	<10.0	<10.0	-	NA	mg/kg
Total TPH	<30.0	<30.0	<30.0	-	500	mg/kg
Naphthalene	<0.004	<0.004	<0.004	-	23	mg/kg
Acenaphthene	<0.003	<0.003	<0.003	-	1,000	mg/kg
Fluorene	<0.003	<0.003	<0.003	-	1,000	mg/kg
Anthracene	<0.004	<0.004	<0.004	-	1,000	mg/kg
Fluoranthene	<0.002	<0.002	<0.002	-	1,000	mg/kg
Pyrene	<0.003	<0.003	<0.003	-	1,000	mg/kg
Benzo(a)anthracene	<0.002	0.007**	<0.002	-	0.22	mg/kg
Chrysene	<0.0008	<0.0008	<0.0008	-	22	mg/kg
Benzo(b)fluoranthene	<0.002	<0.002	<0.002	-	0.22	mg/kg
Benzo(k)fluoranthene	<0.002	<0.002	<0.002	-	2.2	mg/kg
Benzo(a)pyrene	<0.004	<0.004	<0.004	-	0.022	mg/kg
Indeno(1,2,3-cd)pyrene	<0.003	<0.003	<0.003	-	0.22	mg/kg
Dibenzo(a,h)anthracene	<0.004	<0.004	<0.004	-	0.022	mg/kg

**Notes:**

PID - Photoionization Detector

SAR - Sodium Adsorption Ratio

BTEX - Benzene, Toluene,

Ethylbenzene, & Total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

NA - Not Applicable

BG - Background

ppm - parts per million

bgs - below ground surface

mmhos/cm - millihos per centimeter

mg/L - milligrams per liter

mg/kg - milligrams per kilogram

"-" - Indicates no data

\* - Chromium (VI) standard is 23 mg/kg and chromium (III) standard is 120,000 mg/kg.

COGCC - Colorado Oil & Gas Conservation Commission

**Bold** values exceed COGCC Table 910 Standard

\*\* - Analyte detected below the reporting limit; result is an estimated concentration.