

TABLE 1
E34-496 FRAC RELEASE
SOIL ANALYTICAL RESULTS
CAERUS OIL AND GAS LLC
PICEANCE BASIN, COLORADO

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	20200520-E34-496 (SS01) @ 6-9"	20200520-E34-496 (SS02) @ 6-9"	20200520-E34-496 (SS03) @ 6-9"	20200520-E34-496 (SS04) @ 6-9"	20200520-E34-496 (POR) @ 6-9"
Sample Date			5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020
Sample Matrix			Delineation	Delineation	Delineation	Delineation	Delineation
Arsenic	0.39	mg/kg	4.8	3.6	7.5	5.2	4.7
Barium	15,000	mg/kg	4600	1200	3700	3600	1300
Cadmium	70	mg/kg	0.17	0.18	0.18	0.18	0.21
Chromium (III)	120,000	mg/kg	10	9.6	17	14	13
Chromium (VI)	23	mg/kg	<1.0	<0.94	<1.0	<0.96	<0.94
Copper	3,100	mg/kg	10	8.6	15	13	10
Lead	400	mg/kg	11	7.2	15	15	7.6
Mercury	23	mg/kg	0.087	0.047	0.087	0.072	0.071
Nickel	1,600	mg/kg	8.5	7.2	9.5	8.1	10
Selenium	390	mg/kg	<0.40	<0.36	<0.37	<0.39	0.37
Silver	390	mg/kg	<0.058	<0.052	0.058	<0.056	<0.050
Zinc	23,000	mg/kg	31	26	37	34	40
EC	4 or 2x background	mmhos/cm	2.6	3.1	2.0	1.6	0.99
pH	6-9	SU	8.95	8.38	8.10	9.05	9.14
SAR	12	unitless	29	26	16	16	12
TPH-DRO			68	23	45	76	40
TPH-GRO			<3.1	5.1	3.5	<2.8	<2.7
TPH	500	mg/kg	68	28.1	48.5	76	40
Benzene	0.17	mg/kg	<0.0075	<0.0066	<0.0074	<0.0069	<0.0065
Toluene	85	mg/kg	0.021	<0.010	<0.010	<0.011	<0.010
Ethylbenzene	100	mg/kg	<0.0093	<0.0081	<0.0091	<0.0085	<0.0080
Total Xylenes	175	mg/kg	<0.059	<0.051	<0.058	<0.053	<0.051
Acenaphthene	1,000	mg/kg	<0.00099	<0.00087	<0.00096	<0.00094	<0.00092
Anthracene	1,000	mg/kg	<0.0017	<0.0015	<0.0017	<0.0016	<0.0016
Benzo(a)anthracene	0.22	mg/kg	<0.0021	<0.0019	<0.0020	<0.0020	<0.0020
Benzo(b)fluoranthene	0.22	mg/kg	<0.0012	<0.0011	<0.0012	<0.0012	<0.0011
Benzo(k)fluoranthene	2.2	mg/kg	<0.0015	<0.0013	<0.0015	<0.0014	<0.0014
Benzo(a)pyrene	0.022	mg/kg	<0.0014	<0.0012	<0.0014	<0.0013	<0.0013
Chrysene	22	mg/kg	<0.0010	<0.00093	<0.0010	<0.0010	<0.00098
Dibenzo(a,h)anthracene	0.022	mg/kg	<0.0012	<0.0011	<0.0012	<0.0011	<0.0011
Fluoranthene	1,000	mg/kg	<0.00094	<0.00083	0.0031	<0.00089	<0.00087
Fluorene	1,000	mg/kg	<0.0017	<0.0015	<0.0016	<0.0016	<0.0016
Indeno(1,2,3-c,d)pyrene	0.22	mg/kg	<0.0018	<0.0016	<0.0018	<0.0017	<0.0017
Naphthalene	23	mg/kg	0.0070	<0.0020	0.016	0.0051	<0.0021
Pyrene	1,000	mg/kg	0.0096	<0.00074	0.014	0.0089	<0.00078

Notes:

< - less than the stated reporting limit

Highlight - indicates result exceeds the COGCC concentration level

COGCC - Colorado Oil and Gas Conservation Commission

EC - electrical conductivity

mg/kg - milligrams per kilogram

mmhos/cm - millimhos per centimeter

NA - not analyzed

ND - non detect

SAR - sodium adsorption ratio

SU - standard unit

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

TPH-DRO - total petroleum hydrocarbons-diesel range organics

TPH - combination of TPH-GRO and TPH-DRO