

TABLE 1
MESA H2-797 EXCAVATED MATERIAL
ANALYTICAL RESULTS
CAERUS OIL AND GAS LLC
PICEANCE BASIN, COLORADO

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	20171206-H2-797 (Excavated Material)	20180130-H2-797 (Excavated Material)	AS 1*	AS 2*	AS 3*
Sample Date			12/6/2017	1/30/2018	5/4/2011	5/4/2011	5/4/2011
Sample Type			Composite	Composite	Background	Background	Background
Arsenic	0.39	mg/kg	10	NA	23	28	44
Barium	15,000	mg/kg	390	NA	NA	NA	NA
Cadmium	70	mg/kg	0.46	NA	NA	NA	NA
Chromium (III)	120,000	mg/kg	38	NA	NA	NA	NA
Chromium (VI)	23	mg/kg	0.57	NA	NA	NA	NA
Copper	3,100	mg/kg	19	NA	NA	NA	NA
Lead	400	mg/kg	11	NA	NA	NA	NA
Mercury	23	mg/kg	0.0043	NA	NA	NA	NA
Nickel	1,600	mg/kg	22	NA	NA	NA	NA
Selenium	390	mg/kg	1.6	NA	NA	NA	NA
Silver	390	mg/kg	ND	NA	NA	NA	NA
Zinc	23,000	mg/kg	64	NA	NA	NA	NA
EC	4 or 2x background	mmhos/cm	5.2	NA	NA	NA	NA
pH	6-9	SU	7.9	NA	NA	NA	NA
SAR	12	unitless	4.4	NA	NA	NA	NA
TPH-DRO			160	260	NA	NA	NA
TPH-GRO			460	ND	NA	NA	NA
TPH	500	mg/kg	620	260	NA	NA	NA
Benzene	0.17	mg/kg	0.027	NA	NA	NA	NA
Toluene	85	mg/kg	0.74	NA	NA	NA	NA
Ethylbenzene	100	mg/kg	0.72	NA	NA	NA	NA
Total Xylenes	175	mg/kg	46	NA	NA	NA	NA
Acenaphthene	1,000	mg/kg	ND	NA	NA	NA	NA
Anthracene	1,000	mg/kg	ND	NA	NA	NA	NA
Benz(a)anthracene	0.22	mg/kg	ND	NA	NA	NA	NA
Benzo(b)fluoranthene	0.22	mg/kg	ND	NA	NA	NA	NA
Benzo(k)fluoranthene	2.2	mg/kg	ND	NA	NA	NA	NA
Benzo(a)pyrene	0.022	mg/kg	ND	NA	NA	NA	NA
Chrysene	22	mg/kg	ND	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	ND	NA	NA	NA	NA
Fluoranthene	1,000	mg/kg	ND	NA	NA	NA	NA
Fluorene	1,000	mg/kg	ND	NA	NA	NA	NA
Indeno(1,2,3,c,d)pyrene	0.22	mg/kg	ND	NA	NA	NA	NA
Naphthalene	23	mg/kg	1.2	NA	NA	NA	NA
Pyrene	1,000	mg/kg	ND	NA	NA	NA	NA

Notes:

* These samples were collected from an undisturbed area near the Mesa 16 pad (COGCC Facility Number 335519)

< - 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

ND - non detect

NA - not analyzed

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