

TABLE 1
K22 596
FLOWLINE RELEASE SOIL ANALYTICAL RESULTS
CAERUS OIL AND GAS LLC
PICEANCE BASIN, COLORADO

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	Excavation					Soil Boring		Background		
			N WALL 5'	BOT 5'	S WALL 5'	E WALL 5'	W WALL 5'	SB POR 19-20'	SB POR 34-35'	*BKGD 1	*BKGD2	*BKGD 3
Sample Date			9/21/2018	9/21/2018	9/21/2018	9/21/2018	9/21/2018	11/8/2018	11/8/2018	7/22/2013	7/22/2013	7/22/2013
Sample Type			Grab	Grab	Grab	Grab	Grab	Grab	Grab	Background	Background	Background
Arsenic	0.39	mg/kg	15.8	22.6	25.5	14.8	17	NA	NA	39	8.3	8.6
Barium	15,000	mg/kg	252	411	251	239	233	NA	NA	NA	NA	NA
Cadmium	70	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Chromium (III)	120,000	mg/kg	22.4	29	23.1	23.8	27.7	NA	NA	NA	NA	NA
Chromium (VI)	23	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Copper	3,100	mg/kg	23.1	26.7	25.3	23	28.1	NA	NA	NA	NA	NA
Lead	400	mg/kg	15.5	15.6	16.6	15	18.2	NA	NA	NA	NA	NA
Mercury	23	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Nickel	1,600	mg/kg	18.5	18.5	20.1	19.1	18.9	NA	NA	NA	NA	NA
Selenium	390	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Silver	390	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Zinc	23,000	mg/kg	54.1	50	64.2	61.2	55.3	NA	NA	NA	NA	NA
EC	4 or 2x background	mmhos/cm	1.76	0.417	2.51	1.24	1.75	NA	NA	1.2	NA	NA
pH	6-9	SU	7.86	8.48	7.36	7.8	7.74	NA	NA	9.1	NA	NA
SAR	12	unitless	2.12	0.763	0.684	0.568	0.727	NA	NA	2.8	NA	NA
TPH-DRO			12400	3650	3220	14200	12400	2120	103	NA	NA	NA
TPH-GRO			22600	14100	35500	19400	1630	1740	0.228	NA	NA	NA
TPH	500	mg/kg	35000	17750	38720	33600	14030	3860	103.228	NA	NA	NA
Benzene	0.17	mg/kg	0.175	ND	ND	ND	ND	0.00623	0.00547	NA	NA	NA
Toluene	85	mg/kg	ND	ND	ND	ND	ND	0.0215	0.00836	NA	NA	NA
Ethylbenzene	100	mg/kg	23.9	12.9	26.3	16.1	13.8	0.118	0.00163	NA	NA	NA
Total Xylenes	175	mg/kg	333	107	492	332	15	15.5	0.00847	NA	NA	NA
Acenaphthene	1,000	mg/kg	0.218	0.162	ND	0.37	0.498	NA	NA	NA	NA	NA
Anthracene	1,000	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Benz(a)anthracene	0.22	mg/kg	0.039	ND	ND	0.0146	0.0379	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.22	mg/kg	0.0235	ND	ND	0.0179	0.0199	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	2.2	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.022	mg/kg	0.0188	ND	ND	0.0255	0.0197	ND	ND	NA	NA	NA
Chrysene	22	mg/kg	0.0317	ND	ND	0.0138	0.0221	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Fluoranthene	1,000	mg/kg	0.182	0.0245	0.0127	0.145	0.188	NA	NA	NA	NA	NA
Fluorene	1,000	mg/kg	1.00	1.06	0.0814	0.313	1.47	NA	NA	NA	NA	NA
Indeno(1,2,3,c,d)pyrene	0.22	mg/kg	ND	ND	ND	0.00612	ND	NA	NA	NA	NA	NA
Naphthalene	23	mg/kg	112	27.9	17	71.6	123	17.5	ND	NA	NA	NA
Pyrene	1,000	mg/kg	0.094	0.022	ND	0.0438	0.101	NA	NA	NA	NA	NA

Notes:

* These samples were collected from an undisturbed area near the Chevron 418D pad (COGCC Facility Number 324198)

< - 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