

TABLE 1 K10-596 GAS LIFT RELEASE SOIL ANALYTICAL RESULTS CAERUS OIL AND GAS LLC PICEANCE BASIN, COLORADO																	
PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	20190927-K10-596- POR@7'	20191009-K10 (N WALL)@11'	20191009-K10 (EWALL)@10'	20191113-K10(E. WALL)@10'	20191009-K10 (SWALL)@9'	20191112-K10(S. WALL)@9'	20191009-K10 (BOTTOM)@13'	20191113- K10(BASE)@14'	20191009-K10 (WWALL)@9'	20191112-K10(W. WALL)@9'	A15-BG-S-051711	A15-BG-E-051711	A15-BG-NE-051711	A15-BG-N-051711	A15-BG-NW-051711
Sample Date			9/27/2019	10/9/2019	10/9/2019	11/13/2019	10/9/2019	11/12/2019	10/9/2019	11/13/2019	10/9/2019	11/12/2019	5/17/2011	5/17/2011	5/17/2011	5/17/2011	5/17/2011
Sample Matix			Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Background	Background	Background	Background	Background
Arsenic	0.39	mg/kg	35	12.8	12.8	13.9	9.33	11.6	7.91	18.6	7.15	12.3	18	15	11	19	16
Barium	15,000	mg/kg	420	245	223	310	1180	281	234	594	155	256	NA	NA	NA	NA	NA
Cadmium	70	mg/kg	0.34	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	NA	NA	NA	NA	NA
Chromium (III)	120,000	mg/kg	NA	17.7	19	23.8	22.4	27.1	19	18.7	14.8	19.0	NA	NA	NA	NA	NA
Chromium (VI)	23	mg/kg	NA	<2.00	6.69	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	NA	NA	NA	NA	NA
Copper	3,100	mg/kg	35	14.2	16.1	20.1	14.4	18.7	13.6	23.2	12.5	18.1	NA	NA	NA	NA	NA
Lead	400	mg/kg	25	9.46	10.7	12.3	10.8	11.5	9.05	10.4	8.08	11.8	NA	NA	NA	NA	NA
Mercury	23	mg/kg	1.3	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.0409	<0.0300	0.112	<0.0300	NA	NA	NA	NA	NA
Nickel	1,600	mg/kg	21	14.5	16.7	18.1	15.6	18.0	14.2	17.0	11.8	15.0	NA	NA	NA	NA	NA
Selenium	390	mg/kg	1.1	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	NA	NA	NA	NA	NA
Silver	390	mg/kg	0.076	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	NA	NA	NA	NA	NA
Zinc	23,000	mg/kg	70	35.9	41	43.3	44	53.6	39.6	44.4	33.2	45.1	NA	NA	NA	NA	NA
EC	4 or 2x background	mmhos/cm	1.7	0.288	0.383	0.500	0.321	0.662	0.2	0.969	0.364	0.842	NA	NA	NA	NA	NA
pH	6-9	SU	8.49	8.23	8.08	8.27	8.42	8.05	8.57	8.34	8.1	8.04	NA	NA	NA	NA	NA
SAR	12	unitless	1.1	0.735	0.696	0.436	0.744	0.681	0.728	1.60	1	0.687	NA	NA	NA	NA	NA
TPH-DRO			2300	694	74.9	86.4	108	129	397	214	115	153	NA	NA	NA	NA	NA
TPH-GRO			16000	6410	1820	7.02	1080	1.58	6340	3.16	1090	1.42	NA	NA	NA	NA	NA
TPH	500	mg/kg	18300	7104	1894.9	93.42	1188	130.58	6737	217.16	1205	154.42	NA	NA	NA	NA	NA
Benzene	0.17	mg/kg	22	6.06	2.49	<0.00100	1.53	<0.00100	10.7	<0.00100	1.2	0.00117	NA	NA	NA	NA	NA
Toluene	85	mg/kg	330	106	25.3	0.013	19.6	<0.00500	188	0.00543	15.5	0.00680	NA	NA	NA	NA	NA
Ethylbenzene	100	mg/kg	59	14.3	2.16	0.00430	1.92	<0.00250	19.1	<0.00250	1.01	<0.00250	NA	NA	NA	NA	NA
Total Xylenes	175	mg/kg	820	146	21.7	2.01	22.2	0.00808	194	0.218	28.3	0.0458	NA	NA	NA	NA	NA
Acenaphthene	1,000	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Anthracene	1,000	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Benz(a)anthracene	0.22	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.22	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	2.2	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.022	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Chrysene	22	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Fluoranthene	1,000	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Fluorene	1,000	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Indeno(1,2,3,c,d)pyrene	0.22	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA
Naphthalene	23	mg/kg	1.8	0.0768	<0.0200	<0.0200	0.0301	<0.0200	0.122	<0.0200	<0.0200	<0.0200	NA	NA	NA	NA	NA
Pyrene	1,000	mg/kg	<0.0052	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	NA	NA	NA	NA	NA

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