

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
COLORADO OIL AND GAS CONSERVATION COMMISSION (OWP)
PETROSHARE ADCO- UNRUH 23-23, ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C023-048

Sample ID	Sample Date	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	1,2,4-Trimethyl-Benzene (mg/kg)	1,3,5-Trimethyl-Benzene (mg/kg)	Naphthalene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
COGCC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500**		
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500**		
WHF-7	5/19/2023	7	0.0095	7.1	1.9	27	11	4.5	1.5	400	660	66
WHN-4	5/19/2023	4	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
FLW1-5	5/19/2023	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	0.032	<0.0038	4.9	<50	<50
DLE2-4	5/19/2023	4	<0.0020	<0.50	<0.0050	27	83	45	0.31	1400	7700	1100
DLE7-5	5/19/2023	5	<0.0020	<0.0050	<0.0050	0.16	<0.0050	0.15	0.011	4.0	340	140
PWV C-5	5/19/2023	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
ESEP-1	5/19/2023	1	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
NN AST-1	5/19/2023	1	<0.00200	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
NS AST-1	5/19/2023	1	<0.00200	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
ECD-1	5/19/2023	1	<0.00200	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Bold faced values exceed the COGCC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

* Indicates laboratory minimum detection limit in excess of SSL

** Summation of GRO+DRO+ORO must be less than 500 mg/kg

NA - Not analyzed

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
COLORADO OIL AND GAS CONSERVATION COMMISSION (OWP)
PETROSHARE ADCO- UNRUH 23-23, ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C023-048

Sample ID	Sample Date	Depth (ft)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) Anthracene (mg/kg)	Benzo (a) Pyrene (mg/kg)	Benzo (b) Fluoranthene (mg/kg)	Benzo (k) Fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) Pyrene (mg/kg)	Pyrene (mg/kg)	1-Methyl - Naphthalene (mg/kg)	2-Methyl - Naphthalene (mg/kg)
COGCC Table 915-1 Limits (Residential SSL)			360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
WHF-7	5/19/2023	7	<0.00500	<0.00500	0.029	<0.00500	<0.00500	<0.00500	0.00963	<0.00500	<0.00500	0.166	<0.00500	0.011	1.95	1.28
WHN-4	5/19/2023	4	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FLW1-5	5/19/2023	5	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0135	0.0135
DLE2-4	5/19/2023	4	<0.00500	0.330	0.333	0.176	0.252	0.0571	0.359	0.0573	0.782	<0.00500	0.408	1.11	1.28	0.484
DLE7-5	5/19/2023	5	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0148	0.0141
PWV C-5	5/19/2023	5	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
ESEP-1	5/19/2023	1	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
NN AST-1	5/19/2023	1	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
NS AST-1	5/19/2023	1	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
ECD-1	5/19/2023	1	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Bold faced values exceed the COGCC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

* Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed

TABLE 3
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
COLORADO OIL AND GAS CONSERVATION COMMISSION (OWP)
PETROSHARE ADCO- UNRUH 23-23, ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C023-048

Sample ID	Sample Date	Depth (ft)	pH	EC (mmhos/cm)	SAR	Boron (mg/L)
COGCC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
BKG-1	5/19/2023	1	6.99	0.292	0.132	0.158
WHN-4	5/19/2023	4	7.41	2.58	0.975	0.187
FLW1-5	5/19/2023	5	7.56	0.464	0.544	0.222
PWV C-5	5/19/2023	5	8.12	0.298	0.496	0.172
ESEP-1	5/19/2023	1	7.68	0.341	0.236	0.124
ECD-1	5/19/2023	1	7.56	0.315	0.249	0.0816

Bold faced values exceed the COGCC Table 915-1 concentrations

Yellow highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

NA - Not analyzed

TABLE 4
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
COLORADO OIL AND GAS CONSERVATION COMMISSION (OWP)
PETROSHARE ADCO- UNRUH 23-23, ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C023-048

Sample ID	Sample Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
COGCC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
BKG-1	5/19/2023	1	1.59	58.9	<0.218	*<0.30	4.34	7.59	3.65	<0.283	0.0218	14.8
WHN-4	5/19/2023	4	7.16	89.7	<0.263	*<0.30	7.99	11.5	5.66	0.233	0.0474	24.9
FLW1-5	5/19/2023	5	2.40	103	<0.258	*<0.30	8.66	9.93	6.02	<0.335	0.0464	28.8
PWV C-5	5/19/2023	5	2.34	65.0	<0.225	*<0.30	5.14	5.99	4.06	<0.292	0.0274	15.2
ESEP-1	5/19/2023	1	1.81	46.1	<0.233	*<0.30	4.48	7.00	3.79	<0.303	0.0247	15.0
ECD-1	5/19/2023	1	2.33	68.0	<0.249	*<0.30	5.50	6.79	4.39	<0.324	0.0279	16.3

Bold faced values exceed the COGCC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

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NA - Not analyzed