

Soil Sampling Results
Piccoli A 1 Release

Parameter	SS03 01/24/2022 Well pad	SS04 01/24/2022 Flow Path	SS05 01/24/2022 Flow Path	SS06 01/24/2022 Flow Path	SS07 01/24/2022 Flow Path	SS08 01/24/2022 Background	COGCC Table 915 Standard	Units
Depth	0-6 inch	0-6 inch	0-6 inch	0-6 inch	0-6 inch	0-3 inch	NA	inches bgs
Conductivity	2.150	1.860	2.640	2.250	2.540	1.470	<4 or 2x BG	mmhos/cm
pH	7.99	8.46	7.75	7.30	7.20	7.32	6-8.3	pH units
SAR	11.700	13.500	11.70	10.100	1.91	0.59	<6	no units
Calcium	69.20	47.10	90.50	110.00	286.00	214.00	NA	mg/L
Magnesium	13.90	9.88	17.40	16.8	52.30	36.70	NA	mg/L
Sodium	408.0	390.00	465.0	429.00	134.0	35.2	NA	mg/L
Arsenic	3.490	2.70	2.240	1.55	2.410	2.940	0.68	mg/kg
Barium	983	394.0	386	278.0	265	199	15,000	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	71	mg/kg
Chromium (VI)	<0.250	<0.250	0.410	0.942	0.690	<0.250	0.3	mg/kg
Copper	24.3	28.20	23.5	13.90	21.8	15.9	3,100	mg/kg
Lead	10.40	<10.0	<10.0	<10.0	<10.0	<10.0	400	mg/kg
Selenium	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	390	mg/kg
Silver	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	390	mg/kg
Zinc	45.2	57	60.7	39	62.4	38.5	23000	mg/kg
Mercury							N/A	mg/kg
Boron	1.74	2.73	2.12	4.21	2.26	1.96	2.0	mg/L
Benzene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	1.20	mg/kg
Toluene	0.0354	<0.0250	<0.0250	0.0474	<0.0250	-	490	mg/kg
Ethylbenzene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	-	6	mg/kg
Total Xylenes	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	-	58	mg/kg
TPH (GRO)	<10.0	<10.0	<10.0	<10.0	<10.0	-	NA	mg/kg
TPH (DRO)	<10.0	<10.0	<10.0	<10.0	<10.0	-	NA	mg/kg
TPH (EXT DRO)	<10.0	<10.0	<10.0	<10.0	<10.0	-	NA	mg/kg
Total TPH	<30.0	<30.0	<30.0	<30.0	<30.0	-	500	mg/kg
Naphthalene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	-	2	mg/kg
Acenaphthene	<0.024	<0.025	<0.026	<0.027	<0.028	-	360	mg/kg
Fluorene	<0.014	<0.014	<0.014	<0.014	<0.014	-	240	mg/kg
Anthracene	<0.017	<0.017	<0.017	<0.017	<0.017	-	1,800	mg/kg
Fluoranthene	<0.019	<0.019	<0.019	<0.019	<0.019	-	240	mg/kg
Pyrene	<0.013	<0.013	<0.013	<0.013	<0.013	-	180	mg/kg
Benzo(a)anthracene	<0.023	<0.023	<0.023	<0.023	<0.023	-	1.10	mg/kg
Chrysene	<0.017	<0.017	<0.017	<0.017	<0.017	-	110	mg/kg
Benzo(b)fluoranthene	<0.019	<0.019	<0.019	<0.019	<0.019	-	1.10	mg/kg
Benzo(k)fluoranthene	<0.016	<0.016	<0.016	<0.016	<0.016	-	11.0	mg/kg
Benzo(a)pyrene	<0.018	<0.018	<0.018	<0.018	<0.018	-	0.110	mg/kg
Indeno(1,2,3-cd)pyrene	<0.017	<0.017	<0.017	<0.017	<0.017	-	1.10	mg/kg
Dibenzo(a,h)anthracene	<0.019	<0.019	<0.019	<0.019	<0.019	-	0.110	mg/kg

Notes:

PID - Photoionization Detector
SAR - Sodium Adsorption Ratio
BTEX - Benzene, Toluene,
Ethylbenzene, & Total Xylenes
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
EXT - Extended
BG - Background
ND - Non-detect
Bold values exceed COGCC Table
915 Standard

ppm - parts per million
bgs - below ground surface
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Parameter	Well Pad 10/05/20225	Mid Flowpath 10/05/2022	Terminus 10/05/2022	SS08 01/24/2022 Background	COGCC Table 915 Standard	Units
Depth	0-6 inches	0-6 inches	0-6 inches	0-3 inch	NA	inches bgs
Conductivity	2.370	0.679	1.280	1.470	<4 or 2x BG	mmhos/cm
pH	7.68	7.92	7.37	7.32	6-8.3	pH units
SAR	6.28	6.98	0.60	0.59	<6	no units
Calcium	120.00	27.80	165.00	214.00	NA	mg/L
Magnesium	22.10	7.91	39.80	36.70	NA	mg/L
Sodium	285.0	162.00	33.0	35.2	NA	mg/L
Arsenic				2.940	0.68	mg/kg
Barium				199	15,000	mg/kg
Cadmium				<5.00	71	mg/kg
Chromium (VI)				<0.250	0.3	mg/kg
Copper				15.9	3,100	mg/kg
Lead				<10.0	400	mg/kg
Selenium				<20.0	390	mg/kg
Silver				<1.00	390	mg/kg
Zinc				38.5	23000	mg/kg
Mercury					N/A	mg/kg
Boron				1.96	2.0	mg/L
Benzene				<0.0250	1.20	mg/kg
Toluene				-	490	mg/kg
Ethylbenzene				-	6	mg/kg
Total Xylenes				-	58	mg/kg
TPH (GRO)				-	NA	mg/kg
TPH (DRO)				-	NA	mg/kg
TPH (EXT DRO)				-	NA	mg/kg
Total TPH				-	500	mg/kg
Naphthalene				-	2	mg/kg
Acenaphthene				-	360	mg/kg
Fluorene				-	240	mg/kg
Anthracene				-	1,800	mg/kg
Fluoranthene				-	240	mg/kg
Pyrene				-	180	mg/kg
Benzo(a)anthracene				-	1.10	mg/kg
Chrysene				-	110	mg/kg
Benzo(b)fluoranthene				-	1.10	mg/kg
Benzo(k)fluoranthene				-	11.0	mg/kg
Benzo(a)pyrene				-	0.110	mg/kg
Indeno(1,2,3-cd)pyrene				-	1.10	mg/kg
Dibenzo(a,h)anthracene				-	0.110	mg/kg

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