

June 1, 2023

Sabre Beebe  
Simcoe LLC  
1199 Main Ave Suite 101  
Durango, CO 81301

**RE: Piccoli A#1 Discharge Line  
May 2023 Monitoring and Sample Results**

Dear Ms. Beebe,

Cottonwood Consulting LLC (Cottonwood) is pleased to provide Simcoe LLC (Simcoe) with the results of the soil sampling and ocular vegetation monitoring, conducted on May 9, 2023, at the Piccoli A#1 discharge line release site. Details regarding the methodology and associated results are summarized below.

**Background**

A release occurred from a Simcoe discharge line near the Piccoli A#1 in January 2022. A discharge valve on water transfer froze and broke releasing produced water across and off location to the south. Well and lines were shut in and isolated. A hydrovac truck and water truck were used to remove as much produced water as possible from the well pad and below the fill slope.

In order to prevent further contaminant migration beyond the downgradient extent of the initial flow path, Simcoe installed wattles on the fill slope at the culvert leading to the creek and other necessary areas. A piping modification was conducted in January 2022 to eliminate the need for above grade piping and to prevent reoccurring problems.

Simcoe conducted the initial sampling in January 2022. Following the initial sampling, Cottonwood performed soil sampling to determine the extent of the impact on January 24, 2022. Soil sample results from January 24, 2022, indicated levels of SAR (sodium adsorption ratio), boron and chromium (VI) above COGCC Table 915 Standards. Soil sample results also indicated pH outside the range of COGCC Table 915 Standards. Remediation of elevated SAR was performed in-situ by applying a combination of soil amendments and inter-seeding with phytoremediation grass seeds. Monitoring with soil sampling and ocular vegetation monitoring will be performed annually until such time that soil sample values are below the threshold.

Cottonwood was retained by Simcoe to conduct soil sampling and ocular vegetation monitoring for the 2023 monitoring event.

**Monitoring Methodology**

On May 9, 2023, Cottonwood staff conducted soil sampling and ocular vegetation monitoring at the Piccoli A#1 discharge line release site. One soil sample was collected from the well pad within the flow path and four soil samples were collected from within the flow path downgradient of the well pad. At the soil sample locations, a decontaminated stainless-steel shovel was used to transfer soil

into a stainless-steel bowl. The sample was mixed thoroughly in the bowl to create a homogeneous sample. The sample was transferred into a plastic one-gallon sealed bag, placed in a cooler with ice, and submitted to Green Analytical Laboratories (GAL) for analysis of pH, SAR, chromium (VI), and boron.

Observations regarding the physical characteristics of the soil samples and sample locations were recorded in a field notebook. Cottonwood also collected photographs of the sample locations and vegetation monitoring areas.

The release area, fill slope, and the toe of the fill slope were visually inspected for impacts and vegetation coverage. Observations regarding the release area and fill slope were recorded in a field notebook. Cottonwood also collected photographs of the point of release, flow path and overall site.

A soil sampling results table can be found in Table 1, a map of the monitoring effort can be found in Figure 1, photographs of the monitoring effort are provided in Attachment 1, and laboratory analytical data can be found in Attachment 2.

## **Results**

Soil sample results collected on the well pad and collected within the flow path indicated analytes below COGCC Table 915 standards. Ocular vegetation monitoring indicated that remedial vegetation is growing and that vegetation on the cut slope and toe of fill slope is consistent with seasonal and surrounding conditions.

## **Conclusion**

Based on the soil sampling and observations conducted May 9, 2023, no analytes were detected above COGCC Table 915-1 standards in all soil samples collected within the flow path and vegetation was consistent with seasonal and surrounding conditions.

The soil amendment application and seeding of the phytoremediation grass seeds appear to have reduced the concentrations of pH, SAR, boron, and chromium (VI) below COGCC Table 915 standards.

Should you have any questions, please do not hesitate to contact me at 970-764-7356. Cottonwood appreciates the opportunity to provide services to Simcoe.

Sincerely,



Kyle Siesser, P.G.  
Cottonwood Consulting LLC

Attachments: Table 1 – Soil Sampling Results Table  
Figure 1 – Monitoring Map  
Attachment 1 – Photographic Log  
Attachment 2 – Laboratory Analytical Data

**TABLE 1**

**Table 1**  
**Soil Sampling Results**  
**Piccoli A#1**  
**Simcoe LLC**

Parameter	SS03	SS04	SS05	SS06	SS07	SS08	COGCC Table 915-1 Standard	Units
	1/24/2022 Well pad	1/24/2022 Flow path	1/24/2022 Flow path	1/24/2022 Flow path	1/24/2022 Flow path	1/24/2022 Background		
Depth	0-6	0-6	0-6	0-6	0-6	0-3	NA	inches bgs
PID	0.2	0.1	0.1	0.2	0.1	0.1	NA	ppm
Conductivity	2.150	1.860	2.640	2.250	2.540	1.470	<4	mmhos/cm
pH	7.99	<b>8.46</b>	7.75	7.30	7.20	7.32	6-8.3	pH units
SAR	<b>11.7</b>	<b>13.5</b>	<b>11.7</b>	<b>10.1</b>	1.91	0.59	<6	no units
Calcium	69.2	47.1	90.5	110	286	214	NA	mg/L
Magnesium	13.9	9.88	17.4	16.8	52.3	36.7	NA	mg/L
Sodium	408	390	465	429	134	35.2	NA	mg/L
Arsenic	3.49	2.70	2.24	1.55	2.41	2.94	0.68 or 1.25 BG	mg/kg
Barium	983	394	386	278	265	199	15000	mg/kg
Cadmium	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	71	mg/kg
Chromium (VI)	<0.250	<0.250	<b>0.410</b>	<b>0.942</b>	<b>0.690</b>	<0.250	0.3	mg/kg
Total Chromium	16.3	10.3	8.78	7.08	6.92	7.22	NA	mg/kg
Copper	24.3	28.2	23.5	13.9	21.8	15.9	3100	mg/kg
Lead	10.4	<10.0	<10.0	<10.0	<10.0	<10.0	400	mg/kg
Nickel	11.0	9.73	7.88	<5.00	6.28	5.88	1500	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	57.0	60.7	39.0	62.4	38.5	23000	mg/kg
Boron	1.74	<b>2.73</b>	<b>2.12</b>	<b>4.21</b>	<b>2.26</b>	1.96	2	mg/L
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
Benzene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	-	1.2	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	-	5.8	mg/kg
Total Xylenes	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	-	58	mg/kg
1,3,5-trimethylbenzene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	-	27	mg/kg
1,2,4-trimethylbenzene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	-	30	mg/kg
Naphthalene	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	-	2	mg/kg
2-methylnaphthalene	<0.023	<0.023	<0.023	<0.023	<0.023	-	24	mg/kg
1-methylnaphthalene	<0.016	<0.016	<0.016	<0.016	<0.016	-	18	mg/kg
Acenaphthene	<0.024	<0.024	<0.024	<0.024	<0.024	-	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	-	1800	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	-	1.1	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	-	1.1	mg/kg
Benzo(k)fluoranthene	<0.016	<0.016	<0.016	<0.016	<0.016	-	11	mg/kg
Benzo(a)pyrene	<0.018	<0.018	<0.018	<0.018	<0.018	-	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	<0.017	<0.017	<0.017	<0.017	<0.017	-	1.1	mg/kg
Dibenz(a,h)anthracene	<0.019	<0.019	<0.019	<0.019	<0.019	-	0.11	mg/kg

**Notes:**

PID - Photoionization Detector  
 SAR - Sodium Adsorption Ratio  
 TPH - Total Petroleum Hydrocarbons  
 GRO - Gasoline Range Organics  
 DRO - Diesel Range Organics

EXT - Extended  
 NA - Not Applicable  
 BG - Background  
 ppm - parts per million  
 bgs - below ground surface

mmhos/cm - millihos per centimeter  
 mg/L - milligrams per liter  
 mg/kg - milligrams per kilogram

**Table 1**  
**Soil Sampling Results (continued)**  
**Piccoli A#1**  
**Simcoe LLC**

Parameter	SS09	SS10	SS11	SS12	SS13	COGCC Table 915-1 Standard	Units
	5/9/2023 Well pad	5/9/2023 Flow path	5/9/2023 Flow path	5/9/2023 Flow path	5/9/2023 Flow path		
Depth	0-12	0-12	0-12	0-10	0-12	NA	inches bgs
PID	-	-	-	-	-	NA	ppm
Conductivity	-	-	-	-	-	<4	mmhos/cm
pH	7.99	8.01	7.89	7.31	7.90	6-8.3	pH units
SAR	2.22	5.86	4.23	1.08	4.47	<6	no units
Calcium	45.3	24.0	40.5	161	81.3	NA	mg/L
Magnesium	7.80	4.39	8.23	20.6	13.4	NA	mg/L
Sodium	61.4	119	113	55.0	165	NA	mg/L
Arsenic	-	-	-	-	-	0.68 or 1.25 BG	mg/kg
Barium	-	-	-	-	-	15000	mg/kg
Cadmium	-	-	-	-	-	71	mg/kg
Chromium (VI)	<0.250	<0.250	<0.250	<0.250	<0.250	0.3	mg/kg
Total Chromium	-	-	-	-	-	NA	mg/kg
Copper	-	-	-	-	-	3100	mg/kg
Lead	-	-	-	-	-	400	mg/kg
Nickel	-	-	-	-	-	1500	mg/kg
Selenium	-	-	-	-	-	390	mg/kg
Silver	-	-	-	-	-	390	mg/kg
Zinc	-	-	-	-	-	23000	mg/kg
Boron	<1.20	1.53	1.31	<1.20	<1.20	2	mg/L
TPH (GRO)	-	-	-	-	-	NA	mg/kg
TPH (DRO)	-	-	-	-	-	NA	mg/kg
TPH (EXT DRO)	-	-	-	-	-	NA	mg/kg
Total TPH	-	-	-	-	-	500	mg/kg
Benzene	-	-	-	-	-	1.2	mg/kg
Toluene	-	-	-	-	-	490	mg/kg
Ethylbenzene	-	-	-	-	-	5.8	mg/kg
Total Xylenes	-	-	-	-	-	58	mg/kg
1,3,5-trimethylbenzene	-	-	-	-	-	27	mg/kg
1,2,4-trimethylbenzene	-	-	-	-	-	30	mg/kg
Naphthalene	-	-	-	-	-	2	mg/kg
2-methylnaphthalene	-	-	-	-	-	24	mg/kg
1-methylnaphthalene	-	-	-	-	-	18	mg/kg
Acenaphthene	-	-	-	-	-	360	mg/kg
Fluorene	-	-	-	-	-	240	mg/kg
Anthracene	-	-	-	-	-	1800	mg/kg
Fluoranthene	-	-	-	-	-	240	mg/kg
Pyrene	-	-	-	-	-	180	mg/kg
Benzo(a)anthracene	-	-	-	-	-	1.1	mg/kg
Chrysene	-	-	-	-	-	110	mg/kg
Benzo(b)fluoranthene	-	-	-	-	-	1.1	mg/kg
Benzo(k)fluoranthene	-	-	-	-	-	11	mg/kg
Benzo(a)pyrene	-	-	-	-	-	0.11	mg/kg
Indeno(1,2,3-cd)pyrene	-	-	-	-	-	1.1	mg/kg
Dibenz(a,h)anthracene	-	-	-	-	-	0.11	mg/kg

**Notes:**

PID - Photoionization Detector

SAR - Sodium Adsorption Ratio

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

NA - Not Applicable

BG - Background

ppm - parts per million

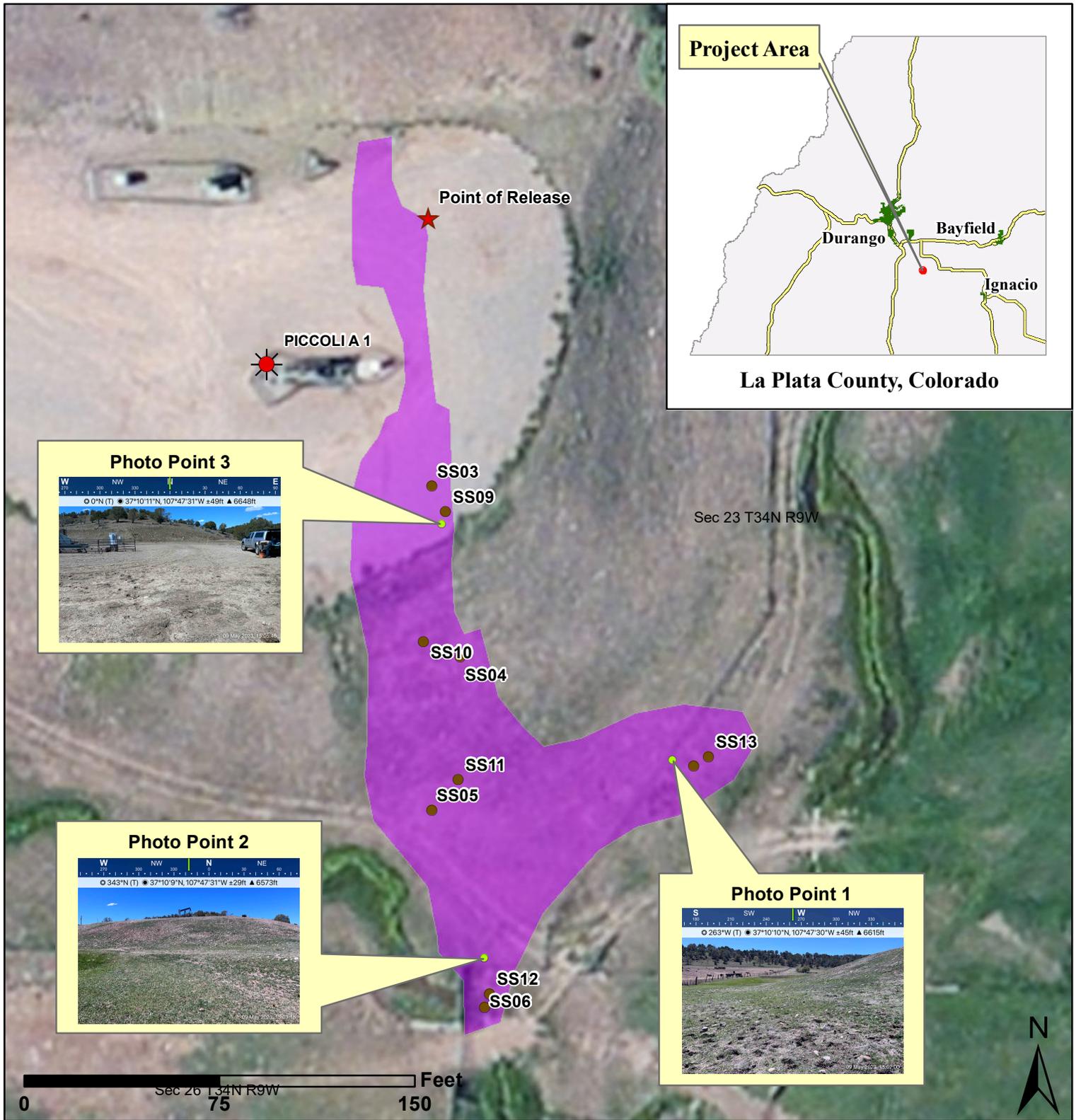
bgs - below ground surface

mmhos/cm - millihos per centimeter

mg/L - milligrams per liter

mg/kg - milligrams per kilogram

**FIGURE 1**



Notes: SS01-SS08 collected 1/24/2022. SS09-SS12 collected 5/9/2023. SS08 collected as a background sample. Wet area and point of release mapped by Simcoe LLC on 1/11/2022.

**Legend**

-  Oil & Gas Well
-  Point of Release (mapped by Simcoe LLC 1/11/2022)
-  Soil Sample
-  Photo Point
-  Approximate Wet Area (mapped by Simcoe LLC 1/11/2022)



Mapping by: E. Millar, 5/31/2023  
 Coordinate System:  
 NAD 1983 UTM Zone 13 N

Location: SWSE Sec 23 T34N R9W NMPM

**Piccoli A #1  
 Project Map  
 Simcoe LLC**

**ATTACHMENT 1**

**Piccoli A#1  
Photographic Log  
Simcoe LLC**



Photo 1: Piccoli A#1 well sign, 5/9/2023.

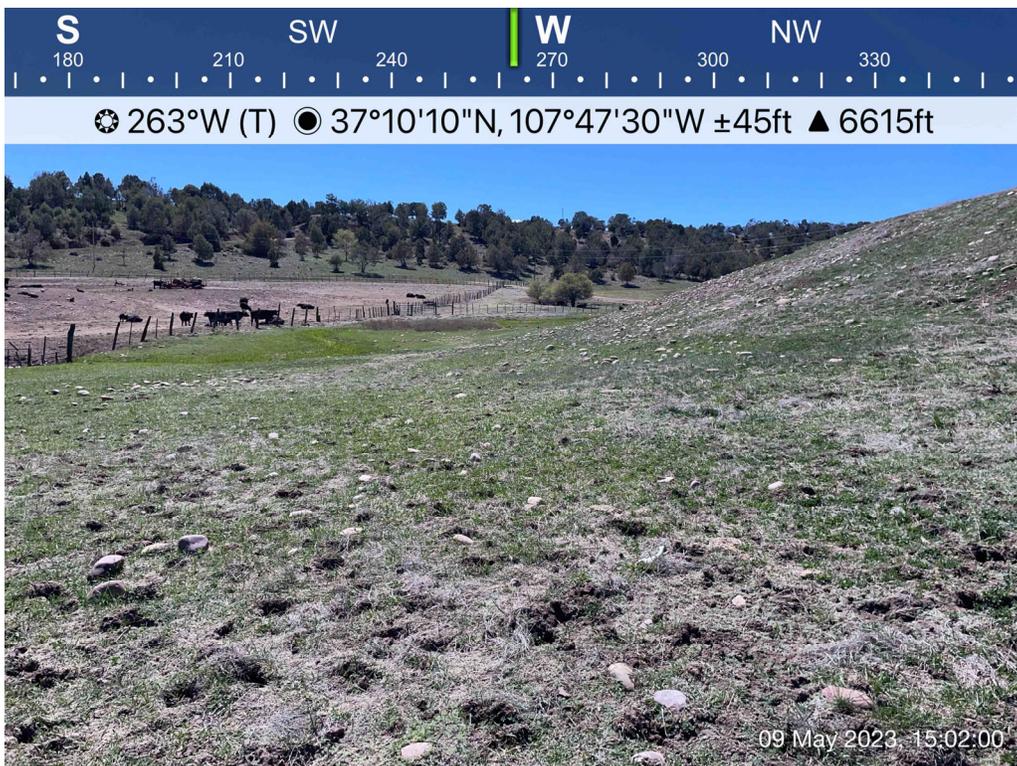


Photo 2: Photo point 1, 5/9/2023.



Photo 3: Photo point 2, 5/9/2023.



Photo 4: Photo point 3, 5/9/2023.

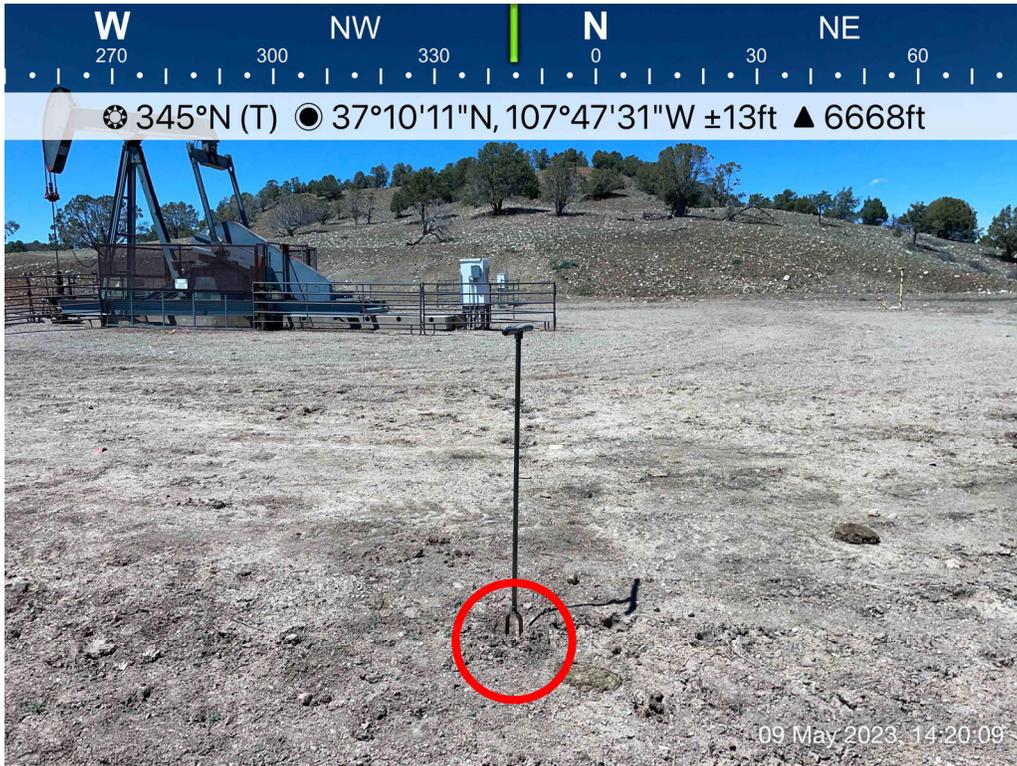


Photo 5: SS09 collected from the well pad within the flow path, 5/9/2023.

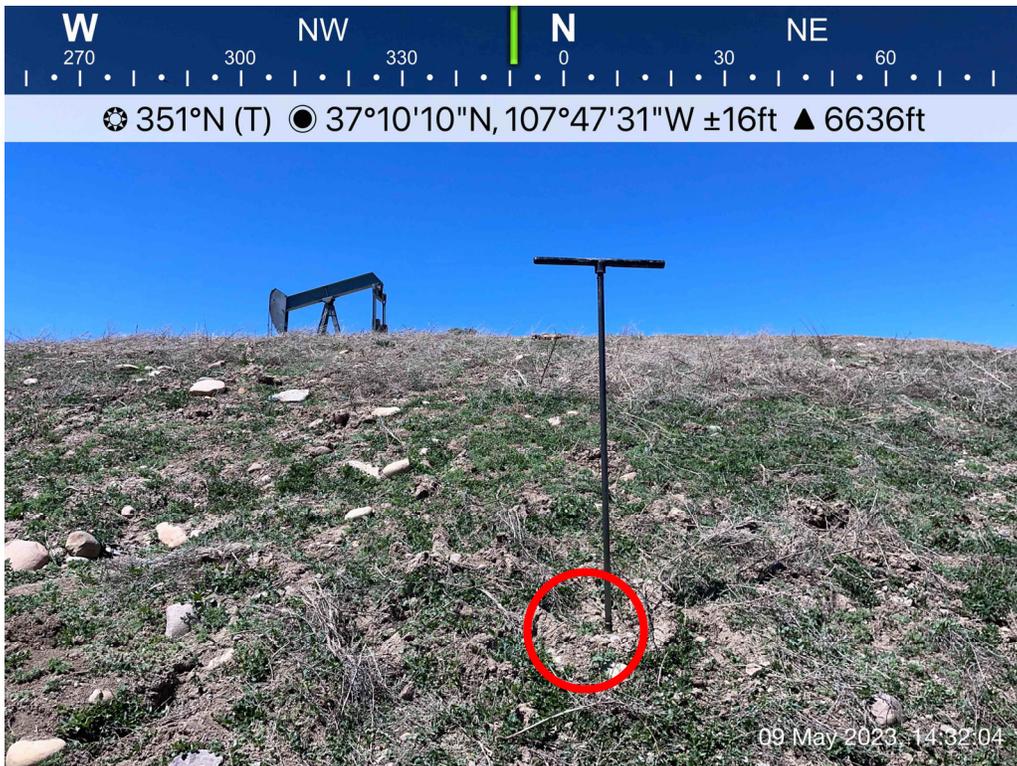


Photo 6: SS10 collected on the fill slope within the flow path, 5/9/2023.

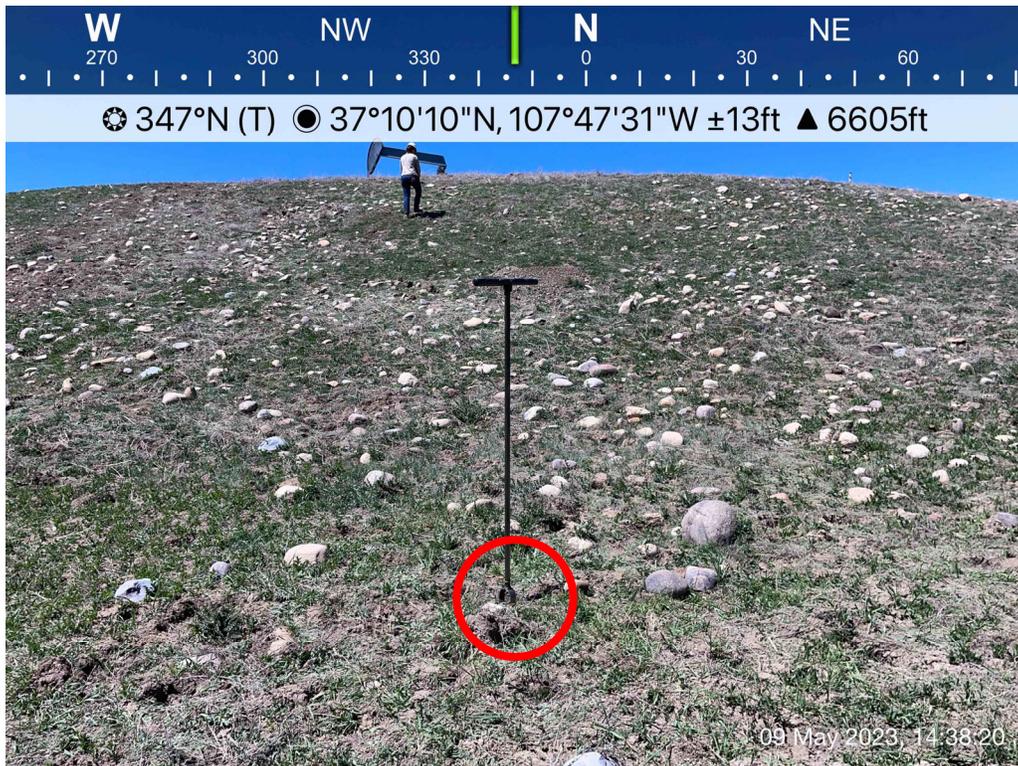


Photo 7: SS11 collected from the base of the fill slope within the flow path, 5/9/2023.



Photo 8: SS12 collected immediately upgradient of the culvert within the flow path, 5/9/2023.

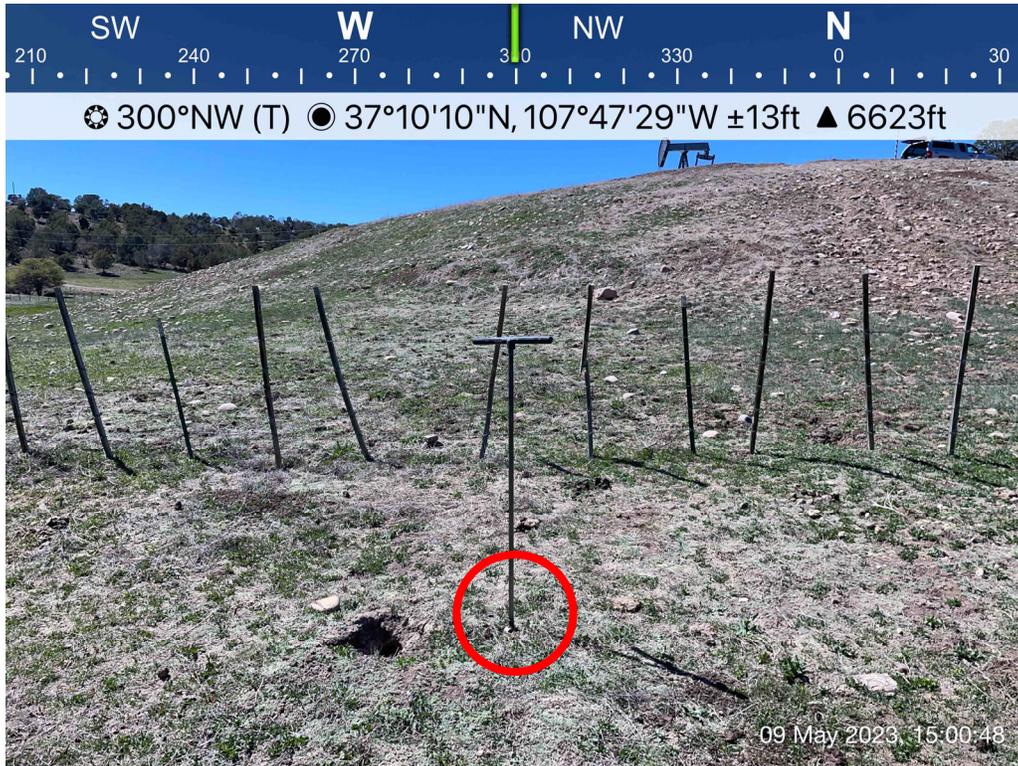


Photo 9: SS13 collected from field within the flow path, 5/9/2023.

**ATTACHMENT 2**



75 Suttle Street  
Durango, CO 81303  
970.247.4220 Phone  
970.247.4227 Fax  
[www.greenanalytical.com](http://www.greenanalytical.com)

25 May 2023

Kyle Siesser  
Cottonwood Consulting  
PO Box 1653  
Durango, CO 81302  
RE: Piccoli A #1

Enclosed are the results of analyses for samples received by the laboratory on 05/09/23 15:41. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen  
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: T104704514-23-17

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: T104704398-23-16



Cottonwood Consulting	Project: SAR, PAH, and Hexachrome	
PO Box 1653	Project Name / Number: Piccoli A #1	<b>Reported:</b>
Durango CO, 81302	Project Manager: Kyle Siesser	05/25/23 13:48

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SS09	2305125-01	Solid	05/09/23 14:15	05/09/23 15:41	
SS10	2305125-02	Solid	05/09/23 14:25	05/09/23 15:41	
SS11	2305125-03	Solid	05/09/23 14:35	05/09/23 15:41	
SS12	2305125-04	Solid	05/09/23 14:45	05/09/23 15:41	
SS13	2305125-05	Solid	05/09/23 14:55	05/09/23 15:41	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: SAR, PAH, and Hexachrome Project Name / Number: Piccoli A #1 Project Manager: Kyle Siesser	Reported: 05/25/23 13:48
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**SS09**

**2305125-01 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/24/23 13:21	3060A/3500-Cr B		CAI
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**Saturated Paste Extraction**

Calcium	45.3	0.100	0.058	mg/L	1	05/19/23 15:35	EPA200.7		AES
Magnesium	7.80	0.100	0.065	mg/L	1	05/19/23 15:36	EPA200.7		AES
pH	7.99			pH Units	1	05/18/23 09:02	ASA#9 10-3.2		KRW
SAR	2.22			No Unit	1	05/19/23 15:35	Calculation		AES
Sodium	61.4	1.00	0.079	mg/L	1	05/19/23 15:35	EPA200.7		AES

**Hot Water Extractable**

Boron	<1.20	1.20	0.568	mg/L	4	05/19/23 16:48	EPA200.7		AES
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Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: SAR, PAH, and Hexachrome Project Name / Number: Piccoli A #1 Project Manager: Kyle Siesser	Reported: 05/25/23 13:48
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**SS10**

**2305125-02 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/24/23 13:21	3060A/3500-Cr B		CAI
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**Saturated Paste Extraction**

Calcium	24.0	0.100	0.058	mg/L	1	05/19/23 15:38	EPA200.7		AES
Magnesium	4.39	0.100	0.065	mg/L	1	05/19/23 15:38	EPA200.7		AES
pH	8.01			pH Units	1	05/18/23 09:02	ASA#9 10-3.2		KRW
SAR	5.86			No Unit	1	05/19/23 15:38	Calculation		AES
Sodium	119	1.00	0.079	mg/L	1	05/19/23 15:38	EPA200.7		AES

**Hot Water Extractable**

Boron	1.53	1.20	0.568	mg/L	4	05/19/23 16:51	EPA200.7		AES
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Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: SAR, PAH, and Hexachrome Project Name / Number: Piccoli A #1 Project Manager: Kyle Siesser	Reported: 05/25/23 13:48
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SS11

2305125-03 (Soil)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/24/23 13:21	3060A/3500-Cr B		CAI
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**Saturated Paste Extraction**

Calcium	40.5	0.100	0.058	mg/L	1	05/19/23 15:41	EPA200.7		AES
Magnesium	8.23	0.100	0.065	mg/L	1	05/19/23 15:41	EPA200.7		AES
pH	7.89			pH Units	1	05/18/23 09:02	ASA#9 10-3.2		KRW
SAR	4.23			No Unit	1	05/19/23 15:41	Calculation		AES
Sodium	113	1.00	0.079	mg/L	1	05/19/23 15:41	EPA200.7		AES

**Hot Water Extractable**

Boron	1.31	1.20	0.568	mg/L	4	05/19/23 16:53	EPA200.7		AES
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Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: SAR, PAH, and Hexachrome Project Name / Number: Piccoli A #1 Project Manager: Kyle Siesser	Reported: 05/25/23 13:48
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**SS12**

**2305125-04 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/24/23 13:21	3060A/3500-Cr B		CAI
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**Saturated Paste Extraction**

Calcium	161	0.200	0.116	mg/L	2	05/19/23 15:43	EPA200.7		AES
Magnesium	20.6	0.200	0.131	mg/L	2	05/19/23 15:43	EPA200.7		AES
pH	7.31			pH Units	1	05/18/23 09:02	ASA#9 10-3.2		KRW
SAR	1.08			No Unit	1	05/19/23 15:43	Calculation		AES
Sodium	55.0	2.00	0.159	mg/L	2	05/19/23 15:43	EPA200.7		AES

**Hot Water Extractable**

Boron	<1.20	1.20	0.568	mg/L	4	05/19/23 16:56	EPA200.7		AES
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Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting PO Box 1653 Durango CO, 81302	Project: SAR, PAH, and Hexachrome Project Name / Number: Piccoli A #1 Project Manager: Kyle Siesser	Reported: 05/25/23 13:48
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**SS13**

**2305125-05 (Soil)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Hexavalent Chromium	<0.250	0.250	0.191	mg/kg dry	25	05/24/23 13:21	3060A/3500-Cr B		CAI
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**Saturated Paste Extraction**

Calcium	<b>81.3</b>	0.200	0.116	mg/L	2	05/19/23 15:46	EPA200.7		AES
Magnesium	<b>13.4</b>	0.200	0.131	mg/L	2	05/19/23 15:46	EPA200.7		AES
pH	<b>7.90</b>			pH Units	1	05/18/23 09:02	ASA#9 10-3.2		KRW
SAR	<b>4.47</b>			No Unit	1	05/19/23 15:46	Calculation		AES
Sodium	<b>165</b>	2.00	0.159	mg/L	2	05/19/23 15:46	EPA200.7		AES

**Hot Water Extractable**

Boron	<1.20	1.20	0.568	mg/L	4	05/19/23 16:58	EPA200.7		AES
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Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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Cottonwood Consulting	Project: SAR, PAH, and Hexachrome	
PO Box 1653	Project Name / Number: Piccoli A #1	<b>Reported:</b>
Durango CO, 81302	Project Manager: Kyle Siesser	05/25/23 13:48

**General Chemistry - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B231262 - General Prep - Wet Chem</b>										
<b>Blank (B231262-BLK1)</b> Prepared: 05/16/23 Analyzed: 05/24/23										
Hexavalent Chromium	ND	0.250	mg/kg dry							
<b>LCS (B231262-BS1)</b> Prepared: 05/16/23 Analyzed: 05/24/23										
Hexavalent Chromium	2.14	0.250	mg/kg dry	2.50		85.7	85-115			

**Saturated Paste Extraction - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B231297 - Paste Extract</b>										
<b>Blank (B231297-BLK1)</b> Prepared: 05/18/23 Analyzed: 05/19/23										
Calcium	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
SAR	0.00		No Unit							
Sodium	ND	1.00	mg/L							

**Hot Water Extractable - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B231294 - General Prep-SOILS</b>										
<b>Blank (B231294-BLK1)</b> Prepared: 05/18/23 Analyzed: 05/19/23										
Boron	ND	1.20	mg/L							

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Cottonwood Consulting  
PO Box 1653  
Durango CO, 81302

Project: SAR, PAH, and Hexachrome  
Project Name / Number: Piccoli A #1  
Project Manager: Kyle Siesser

**Reported:**  
05/25/23 13:48

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis  
\*Results reported on as received basis unless designated as dry.
- RPD Relative Percent Difference
- LCS Laboratory Control Sample (Blank Spike)
- RL Report Limit
- MDL Method Detection Limit

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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service@greenanalytical.com or dzurfeil@greenanalytical.com  
 75 Suttle St Durango, CO 81303

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: Cottonwood Consulting LLC

Project Manager: Kyle Siesser

Address: PO Box 1653

City: Durango

Phone #: 970-764-7356

Additional Report To:

Project Name: Piccoli A #1

Project Number:

Sampler Name (Print): Kyle Siesser

Bill to (if different):

**ANALYSIS REQUEST**

Lab I.D.	Sample Name or Location	Collected		Matrix (check one)						# of containers					ANALYSIS REQUEST				
		Date	Time	GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	OTHER :	No preservation (general)	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	Other:	Other:	PH	SAR	chromium (VI)	boron
2305-126-125 125 2305-126-125-11		5/19/23	1415						X							X	X	X	X
01	SS09								X							X	X	X	X
02	SS10								X							X	X	X	X
03	SS11								X							X	X	X	X
04	SS12								X							X	X	X	X
05	SS13								X							X	X	X	X

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: MSK Date: 5/19/23 Received By: MSK Time: 1541

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Received By: \_\_\_\_\_ Time: \_\_\_\_\_

Delivered By: (Circle One) UPS - FedEx - Kangaroo - Other: \_\_\_\_\_ Temperature at receipt: 12.9°C CHECKED BY: MR

Report to State? (Circle) No

\* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.



SAMPLE CONDITION RECEIPT FORM

Client Name: Cottonwood Consulting

Work Order # 285-125

Courier:  Fed Ex  UPS  USPS  Client  Kangaroo

Custody Seals on Box/Cooler Present:  Yes  No      Seals Intact:  Yes  No

Thermometer Used: #2      Samples on ice, cooling process has begun:  Yes  No

Type of Ice:  Wet  Blue  None

Cooler Temp: Observed Temp: 17.9 °C      Correction Factor: 0 °C      Final Temp: 17.9 °C

\* Temp should be above freezing to 6°C

Date/Initials of person examining contents: MRN 5/9/23  
Labeled by Initials: \_\_\_\_\_  
(If different than above)

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Dissolved Testing Needed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11.
Field Filtered: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Labels match COC: -Includes Date/Time/ID	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
Matrix:	<input checked="" type="radio"/> WT <input type="radio"/> SL <input type="radio"/> OT	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/Resolution:

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_