

DATA QUALITY REVIEW SHEET

COGCC Facility ID: 753790
 Station Name: Revell Spr
 Sample Date: 3/8/2022
 Field Sample ID: Revell Spr

Operator: TEP Rocky Mountain LLC
 Drill Pad: Tompkins Pad
 Purpose: Rule 411 Nov/Dec 2021
 Lab Sample ID: 2203154-2

Field Sampling Data Review	Yes	No	N/A
1. Well properly purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Flow rate reduced prior to sampling?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Water quality parameters stable prior to sampling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Field instruments calibrated properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Sampling methods performed according to SAP procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Procedures consistent with obtaining a representative sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lab Data Report Review			
7. Proper sample custody maintained until laboratory receipt?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Receipt form is without discrepancies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Samples received at the recommended water temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. All samples analyzed for the requested analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Proper laboratory methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. All sample holding times met besides pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Lab QC samples (LCS, LCSD, MB, MS, and MSD) collected and analyzed according to lab method and results within method acceptance limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Was the field investigation sample matrix used by the lab for matrix QC for all analyses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. Laboratory qualifiers for sample results (other than non-detect)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Additional qualifiers assigned by WWL to the sample results?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Were submitted trip blanks acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Are corrective actions required? <i>If yes, list actions and dates to be completed by:</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Corrective Action</i>	<i>Date to be completed</i>		
None	N/A		

Calculated Parameters	Calculated Value	Measured Lab Value	Ratio/Percent Difference	Acceptable Limit	Meets QC Criteria?
Cation/Anion Balance, % (CAB)	5.291%	N/A	N/A	2%	<input type="checkbox"/>
Total Dissolved Solids, mg/L (TDS)	287	0	0.00	1.0 – 1.2	<input type="checkbox"/>
Specific Conductance, $\mu\text{S}/\text{cm}$ (SpC)	0	506	0.00	0.9 – 1.1	<input type="checkbox"/>
TDS/SpC, calculated	N/A	N/A	0.00	0.55-0.7	<input type="checkbox"/>
TDS/SpC, lab measured	N/A	N/A	0.00	0.55-0.7	<input type="checkbox"/>
Anion (meq/L):SpC	N/A	N/A	1.09	0.9 – 1.1	<input checked="" type="checkbox"/>
Cation (meq/L):SpC	N/A	N/A	1.21	0.9 – 1.1	<input type="checkbox"/>

DATA QUALITY REVIEW SHEET

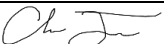
Comments:

All sampling procedures followed the COGCC SAP (Version 2 – April 2020) for Rule 411. Dissolved metals were filtered by the laboratory upon arrival. The Revell Spr sample was filled ex-situ from a 5-gallon bucket that was filled from the pipe in the Revell Spring pump house. No other field procedure deviations occurred that were cause for data qualification. A field duplicate was collected at Revell Spr as Parachute 2, therefore RPDs were calculated. Revell Spr was sent to ALS and Parachute 2 was sent to Green Analytical Laboratories.

- All RPD calculations were within acceptable limits except for the results of: total alkalinity with Revell Spr equaling 240 mg/l and Parachute 2 equaling 315 mg/l (RPD = 27.0%); bicarbonate with Revell Spr equaling 240 mg/l and Parachute 2 equaling 315 mg/l (RPD = 27.0%); total dissolved solids with Revell Spr equaling 0 mg/l and Parachute 2 equaling 330 mg/l; calcium with Revell Spr equaling 37 mg/l and Parachute 2 equaling 29.8 mg/l (RPD = 21.6%). WWL has qualified the results as appropriate due to the results of the RPD calculations.

The TDS result of ND (not detected) by ALS for the Revell Spr sample was qualified as rejected by WWL, as some individual inorganic constituents were comparable with sample Parachute 2 duplicate sample analyzed by Green.

The analytes requested on the COC matched the requirements of Colorado Oil and Gas Conservation Commission (COGCC) Rule 411, with the exception of Revell Spr not including arsenic and chromium VI. The sample, Revell Spr, was shipped to ALS on March 8, 2022 and received by ALS in one cooler on March 9, 2022. The cooler was within the temperature range criteria (0-6°C), measuring 0.9°C. For sample Revell Spr, laboratory pH associated with the sample was analyzed 2 days out of holding time; WWL assigned an “H” qualifier to indicate the results are estimated. The CAB was not within the acceptable limit, but is less than 10%. Therefore, WWL has taken the cautionary measure to qualify the inorganic data for these samples as estimated. The TDS ratio for Revell Spr did not fall within acceptable limits. WWL qualified Revell Spr sample TDS data based on low TDS ratio results meaning the results are estimated. All of the MBs used to assess background contamination or other interferences with analytic instrumentation yielded “Not Detected” results with the exception of calcium being qualified with a J qualifier by ALS. A “J” qualifier was assigned for the analysis for diesel range organics (DRO). No additional qualifiers were assigned by WWL because of lab precision or accuracy.

Data Suitability Statement			
Based upon this data quality review and your professional judgement, have the data been collected and analyzed in general accordance with the COGCC Model Sampling and Analysis Plan?			<input checked="" type="checkbox"/>
Are the data suitable for release for incorporation into the COGCC Environmental Database?			<input checked="" type="checkbox"/>
The inorganic data are qualified due to QC criteria not being met; data are considered estimated and released for incorporation into the COGCC Environmental Database.			<input checked="" type="checkbox"/>
Data Reviewer's Name:	Charles Jones	Company:	Western Water & Land, Inc.
Reviewer's Signature:		Date:	8/10/2022