

DATA QUALITY REVIEW SHEET

COGCC Facility ID: 755510
 Station Name: Hayes Gulch UP
 Sample Date: 4/7/2021
 Field Sample ID: Hayes Gulch UP

Operator: TEP Rocky Mountain LLC
 Drill Pad: GM 241-1 Injection Pad
 Purpose: 2021 Annual COA
 Lab Sample ID: 2104159-1

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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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>		
ALS issued the analytic report with the incorrect sample ID names from the COC. The lab was contacted via email on 7/14/2021 to correct the sample IDs in the analytic report to match the sample IDs listed on the COC and the field form. Two follow-up reminder emails were sent to ALS on 7/29/2021 and on 8/12/2021. ALS sent the revised reports on August 12, 2021.	8/12/2021		

Calculated Parameters	Calculated Value	Measured Lab Value	Ratio/Percent Difference	Acceptable Limit	Meets QC Criteria?
Cation/Anion Balance, % (CAB)	4.567%	N/A	N/A	5%	<input checked="" type="checkbox"/>
Total Dissolved Solids, mg/L (TDS)	752	730	0.97	1.0 – 1.2	<input type="checkbox"/>
Specific Conductance, $\mu\text{S}/\text{cm}$ (SpC)	1090	1097	0.97	0.9 – 1.1	<input checked="" type="checkbox"/>
TDS/SpC, calculated	N/A	N/A	0.69	0.55-0.7	<input checked="" type="checkbox"/>
TDS/SpC, lab measured	N/A	N/A	0.67	0.55-0.7	<input checked="" type="checkbox"/>
Anion (meq/L):SpC	N/A	N/A	1.13	0.9 – 1.1	<input type="checkbox"/>

DATA QUALITY REVIEW SHEET

Cation (meq/L):SpC	N/A	N/A	1.24	0.9 – 1.1	<input type="checkbox"/>
<p>Comments: BTEX/GRO were analyzed twelve hours out of holding time; WWL assigned an “H” qualifier to indicate the result is estimated. A “*” qualifier was assigned to GRO in the LCS, indicating the spike recovery is equal to or outside the control criteria. ALS selected field investigation sample Hayes Gulch UP for testing matrix quality control for lab duplicate RPD for laboratory specific conductivity. No sample results were assigned qualifiers by the laboratory with the exception of a “J” qualifier assigned to manganese to indicate a result greater than the method detection limit but less than the reporting limit (result is estimated).</p>					

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"/>
Data Reviewer's Name:	Trevor Smith	Company:	Western Water & Land, Inc.
Reviewer's Signature:	<i>T. Smith</i>	Date:	8/12/2021