

## DATA QUALITY REVIEW SHEET

COGCC Facility ID: 755511  
 Station Name: Hayes Gulch DWN  
 Sample Date: 4/19/2022  
 Field Sample ID: HG DWN

Operator: \_\_\_\_\_  
 Drill Pad: \_\_\_\_\_  
 Purpose: \_\_\_\_\_  
 Lab Sample ID: \_\_\_\_\_

TEP Rocky Mountain LLC  
GM 241-1 Injection Pad  
2022 Annual COA  
2204349-2

| 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 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 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>         |                                     |                                     |
| .   |                                     |                                     |                                     |

| Calculated Parameters                               | Calculated Value | Measured Lab Value | Ratio/Percent Difference | Acceptable Limit | Meets QC Criteria?                  |
|---|------------------|--------------------|--------------------------|------------------|-------------------------------------|
| Cation/Anion Balance, % (CAB)                       | 0.218%           | N/A                | N/A                      | 5%               | <input type="checkbox"/>            |
| Total Dissolved Solids, mg/L (TDS)                  | 699              | 670                | 0.96                     | 1.0 – 1.2        | <input type="checkbox"/>            |
| Specific Conductance, $\mu\text{S}/\text{cm}$ (SpC) | 1000             | 850                | 1.18                     | 0.9 – 1.1        | <input type="checkbox"/>            |
| TDS/SpC, calculated                                 | N/A              | N/A                | 0.70                     | 0.55-0.7         | <input checked="" type="checkbox"/> |
| TDS/SpC, lab measured                               | N/A              | N/A                | 0.79                     | 0.55-0.7         | <input type="checkbox"/>            |
| Anion (meq/L):SpC                                   | N/A              | N/A                | 1.43                     | 0.9 – 1.1        | <input type="checkbox"/>            |
| Cation (meq/L):SpC                                  | N/A              | N/A                | 1.43                     | 0.9 – 1.1        | <input type="checkbox"/>            |

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**Comments:**

Sample HG Up was analyzed six days out of holding time for laboratory pH and two days out of holding time for DRO; WWL assigned an "H" qualifier to indicate the result is estimated. All of the MBs used to calibrate the analytic instrumentation for analyzing the sample yielded "Not Detected" results with the exception of sodium associated with lab sample ID FP220422-1. The result for sodium showed a value of -0.2, which indicates instrument noise. ALS assigned a "J" qualifier to sodium as a result. No additional qualifiers were assigned by WWL or ALS because of the method blank results. ALS qualifies analytes with a "J" to indicate that the result is less than the reporting limit but greater than the method detection limit. The result is presented as estimated. DRO was assigned a "J" qualifier by ALS for HG DWN. ALS did not assign any other qualifiers based on detection limits.

**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?



Are the data suitable for release for incorporation into the COGCC Environmental Database?



**Data Reviewer's Name:** Alex Kubala

**Company:** Western Water & Land, Inc.

**Reviewer's Signature:** 

**Date:** 12/7/2022