

DATA QUALITY REVIEW SHEET

COGCC Facility ID: 334724
 Station Name: BMP24
 Sample Date: 7/20/2022
 Field Sample ID: BMP24

Operator: TEP Rocky Mountain LLC
 Drill Pad: GV 65-2
 Purpose: Rule 411 March-April 2022
 Lab Sample ID: 2207246-01

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 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Were submitted trip blanks acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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)	3.726%	N/A	N/A	5%	<input checked="" type="checkbox"/>
Total Dissolved Solids, mg/L (TDS)	974	1190	1.20	1.0 – 1.2	<input checked="" type="checkbox"/>
Specific Conductance, $\mu\text{S}/\text{cm}$ (SpC)	1776	1730	1.00	0.9 – 1.1	<input checked="" type="checkbox"/>
TDS/SpC, calculated	N/A	N/A	0.55	0.55-0.7	<input checked="" type="checkbox"/>
TDS/SpC, lab measured	N/A	N/A	0.69	0.55-0.7	<input checked="" type="checkbox"/>
Anion (meq/L):SpC	N/A	N/A	1.30	0.9 – 1.1	<input type="checkbox"/>
Cation (meq/L):SpC	N/A	N/A	1.20	0.9 – 1.1	<input type="checkbox"/>

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Comments:

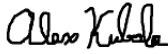
pH was qualified by WWL with an “H” qualifier to indicate the analyte was estimated due to exceeded holding time.

Green Analytical Laboratory (GAL) qualifies sample results that exceed the method detection limit (MDL) but are lower than the reporting limit (RL) with a “J” to indicate the result is estimated. A “J” qualifier was assigned to zinc. WWL did not assign additional qualifiers based on qualifiers assigned by GAL. GAL mistakenly indicated that chrome VI was out of holding time; it was not.

All of the Method Blanks (MBs) used to assess background contamination or other interferences with analytic instrumentation yielded “Not Detected” results with the exception of alkalinity (total as CaCO₃), associated with lab MB sample B222004-BLK1 and sodium associated with lab MB sample B222044-BLK1 being qualified with a J qualifier meaning the result is an estimated value because the result is less than the reporting limit but greater than the instrument method detection limit (MDL). No additional qualifiers were assigned by WWL because of the method blank results.

No qualifiers were assigned to any of the spiked samples (MB, LCS, LCSD, MS, or MSD) associated with the BMP24 sample as a result of the percent recovery of an analyte or surrogate being outside of the control limits with the exception of surrogates 2-fluorobiphenyl and nitrobenzene-d5 associated with LCS lab sample 2071904-BS1 and surrogates 2-fluorobiphenyl and nitrobenzene-d5 associated with LCS Duplicate lab sample 2071904-BSD1. These surrogates were assigned a “S-09” qualifier meaning the surrogate recovery was biased high. The surrogate recovery in associated samples was within the acceptance criteria and the samples were ND. No negative impact on the data is expected.

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 one or more 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:	Alex Kubala	Company: Western Water & Land, Inc.
Reviewer's Signature:		Date: 12/26/2022