

DATA QUALITY REVIEW SHEET

Facility ID: 755923
 Station Name: Naugle 202848
 Sample Date: 4/02/2024
 Field Sample ID: Naugle 20284

Operator: TEP Rocky Mountain LLC
 Drill Pad: PA 22-25
 Purpose: Second Subsequent Rule 615
 Lab Sample ID: L1721536-03

Field Sampling Data Review	Yes	No	N/A
1. Well properly purged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Flow rate reduced prior to sampling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Water quality parameters stable prior to sampling?	<input type="checkbox"/>	<input checked="" 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? <i>If no, list in comments.</i>	<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 QA samples (e.g., matrix spikes and matrix spike duplicates) 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 data (other than non-detect)? <i>List in comments.</i>	<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. 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>		
N/A	N/A		

Calculated Parameters	Calculated Value	Measured Lab Value	Ratio/Percent Difference	Acceptable Limit	Meets QC Criteria?
Cation/Anion Balance, % (CAB)	7.23%	N/A	N/A	5%	<input type="checkbox"/>
Total Dissolved Solids, mg/L (TDS)	4184	4300	1.03	1.0 – 1.2	<input checked="" type="checkbox"/>
Specific Conductance, $\mu\text{S}/\text{cm}$ (SpC)	6418	5810	1.105	0.9 – 1.1	<input type="checkbox"/>
TDS/SpC, calculated	N/A	N/A	0.65	0.55-0.7	<input checked="" type="checkbox"/>
TDS/SpC, lab measured	N/A	N/A	0.74	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	1.26	0.9 – 1.1	<input type="checkbox"/>

Comments:

- Field parameter temperature was not stable prior to sampling.
- A three-casing volume was not able to be measured prior to sampling due to the inability of measuring a water level because the well lid was not able to be removed.
- The CAB was not within the acceptable limit. WWL assigned an “O” qualifier.
- Laboratory pH analysis exceeded holding time by two days. Pace assigned an “T8” qualifier.
- Pace assigned a “J” qualifier to fluoride, boron, and C10-C28 diesel range organics. Pace assigned a “J1” qualifier to (s) 1,2- dichloroethane- d4, a surrogate.
- Pace assigned a “J6” qualifier for nitrate-nitrite, total phosphorus, and bromide indicating the sample matrix interfered with the ability to make an accurate determination; spike value is low.
- Pace assigned a “V” qualifier for chloride, calcium and sulfate indicating the sample concentration is too high evaluate accurate spike recoveries.
- Nitrate-nitrite, bromide, chloride, calcium, and sulfate were not within MS and MSD method control limits for accuracy.
- Sulfate was assigned an “E” qualifier by Pace to indicate the analyte exceeds the upper limit of the calibration range for the instrument established by the initial calibration.
- Pace assigned a “J3” qualifier for total phosphorus indicating the associated batch QC was outside the quality control range for precision.

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 ECMC Model Sampling and Analysis Plan?		<input checked="" type="checkbox"/>
Are the data suitable for release for incorporation into the ECMC 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 ECMC Environmental Database.		<input checked="" type="checkbox"/>
Data Reviewer's Name:	Taralee Mautz	Company: Western Water & Land, Inc.
Reviewer's Signature:	<i>Taralee Mautz</i>	Date: 05/01/2024