

DATA QUALITY REVIEW SHEET

Facility ID: 754438
 Station Name: B29
 Sample Date: 5/8/2019
 Field Sample ID: B29

Project: TEP 317B: Mar/Apr 2019
 Lab Work Order: 1905160-1
 QA/QC Review Date: 6/14/2019
 Reviewer: S. Goodwin

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? <i>If no, list in comments.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. All samples analyzed for the requested analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Proper laboratory methods used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. All sample holding times met (other than lab pH)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 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"/>
13. 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"/>
14. Laboratory qualifiers for data (other than non-detect)? <i>List in comments.</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Additional qualifiers assigned (other than pH)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. 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			

Calculated Parameters	Calculated Value	Lab Value	Ratio/Percent Difference	Acceptable Limit	Meets QC Criteria?
Cation/Anion Balance, % (CAB)	1.029	N/A	N/A	±5%	<input checked="" type="checkbox"/>
Total Dissolved Solids, mg/L (TDS)	327	300	1.09	0.8 – 1.2	<input checked="" type="checkbox"/>
Specific Conductance, µS/cm (SpC)	448	536	0.84	0.8 – 1.2	<input checked="" type="checkbox"/>

Comments: The ALS lab courier did not use custody seals on the shipping container. Laboratory pH was analyzed out of analysis holding time, WWL qualified with "H"; result considered estimated. "J" qualifier assigned to nitrate/nitrite, nitrate, nitrite, arsenic, boron, chromium, and selenium sample results and to barium, boron, chromium, iron, and sodium method blank results to indicate a result greater than the method detection limit but less than the reporting limit.

The MS and MSD recoveries met guidance criteria for precision and accuracy for all analytes with the exception of the following:

Analyte	MS Recovery	MSD Recovery	Recovery Limits
Sulfate	124%	Not Analyzed	85-115%
Nitrite	80%	Not Analyzed	85-115%

The lab assigned an "N" qualifier to B29 sample results for sulfate and nitrite to indicate the spiked sample was not in recovery; the native sample (B29) concentration was less than four times the spike added concentration. The lab reported that the LCS indicated the procedure was in control and no further action was necessary.