

Data Validation Report

Project: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling
 Portland Harbor Superfund Site
 Porewater

Laboratory: TestAmerica Laboratories, Incorporated, Seattle, WA

Laboratory Groups: 580-80529-1

Analyses: Bromide

Validation Level: Stage 4

AECOM Project

Number: 60566335, Task #2.12

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Completed on: November 19, 2018

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File Name: 580-80529-1 DVR

SUMMARY

The data quality review of four porewater samples collected on September 20, 2018, has been completed. Samples were analyzed for bromide by EPA Method 300.0 by TestAmerica Laboratories, Incorporated (TA) located in Tacoma, Washington. The analyses were performed in general accordance with the method specified in EPA's *Methods for Chemical Analysis of Water and Wastes*, March 1983. The laboratory provided level 2 and level 4 data packages containing sample results, and associated quality assurance (QA) and quality control (QC) data, preparation logs, and raw instrument outputs (where applicable). The following samples are associated with laboratory group 580-80529-1:

Sample ID	Laboratory ID
Br_Test_Baseline	580-80529-1
Br_Test_1	580-80529-2
Br_Test_2	580-80529-3
Br_Test_3	580-80529-4

Data validation is based on method performance criteria and QC criteria documented in the *Quality Assurance Project Plan (QAPP)*, dated March 23, 2018, as amended. If data qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in the EPA document *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review*, January 2017. Data qualifiers assigned to this sample set are included in Table 1.

SAMPLE RECEIPT

Upon receipt by TA, the sample jar information was compared to the chain-of-custody (COC) and the cooler temperature was recorded. The cooler was received at a temperature within the EPA-recommended limits of greater than 0°C and less than or equal to 6°C.



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CONVENTIONAL ANALYSIS

Samples were analyzed for bromide by EPA Method 300.0.

1. Holding Times – Acceptable
2. Initial and Continuing Calibration Verifications – Acceptable
3. Blanks – Acceptable
4. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) – Acceptable
5. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD was not performed using a sample from this laboratory group. Accuracy was assessed using the LCS/LCSD recoveries.

6. Laboratory Duplicate

A laboratory duplicate was not performed using a sample from this laboratory group. Precision was assessed using the LCS/LCSD relative percent differences.

7. Calculation Checks – Acceptable

A calculation check was performed for sample results on one sample per calibration. The review confirmed the final results were correct as reported.

8. Reporting Limits – Acceptable

OVERALL ASSESSMENT OF DATA

The data reported in this laboratory group, as qualified, is considered usable for meeting project objectives. The completeness for laboratory group 580-80529-1 is 100%.

Table 1
QA/QC Data Summary Review
Portland Harbor
Porewater
TestAmerica Laboratory Group: 580-80529-1

Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
No data qualifiers were assigned to results reported in 580-80529-1 based on this data validation.							