

Data Usability Review for NW Pipe

Collected May 22, 2013

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Summary

This memorandum summarizes the review of the QA/QC data associated with the analysis of two samples collected on May 22, 2013 from the NW Pipe site.

Metals including mercury, volatile organic hydrocarbons (VOCs), polycyclic aromatic hydrocarbons (PAHs), total suspended solids (TSS), and total organic carbon (TOC) analyses were performed by the Applied Sciences Group laboratory, located in Corvallis, Oregon. Data was reported in analytical batch ASL M1935.

Chlorinated pesticides and polychlorinated biphenyls (PCBs) analyses were performed by Test America laboratory, located in Tacoma, Washington. Data was reported in analytical batch 580-38690-1

EPA Contract Laboratory Program (CLP) *National Functional Guidelines (NFG) for Low Concentration Organic Data Review* (June 2001), *National Functional Guidelines (NFG) for Organic Data Review* (October 1999), and *National Functional Guidelines (NFG) for Inorganic Data Review* (July 2002) provided guidelines for data qualification, where applicable.

The intent of this review was to assess the appropriate use or “usability” of the analytical data based on the QA/QC data reported by the laboratory. This QA review focuses on criteria for the following QA/QC parameters and their overall effect on the data:

- Sample custody, handling, and preservation
- Holding time compliance
- Summary initial and continuing calibration data
- Method blanks
- Surrogate spike recovery
- Precision and Accuracy (laboratory control samples and spike/spike duplicates)

Only summary QA/QC information were reviewed for each analytical parameter. Analytical results and QA/QC summary information were provided by ASL and Test America for all sample analyses. The data set is usable when used in conjunction with information discussed below and any flags applied to the hard copy data by the laboratory or during this review.

Sample Custody and Handling

Chain-of-custody (COC) forms and laboratory sample receiving checklists were reviewed.

No exceptions were found on the COC's.

Initial Calibration

Initial calibration data were provided by ASL for each instrument used for analysis. All target compounds met initial calibration QC acceptance criteria.

Continuing Calibration

Continuing calibration data were provided by ASL for each instrument used for analysis. All target compounds met initial calibration QC acceptance criteria.

Holding Times

Extraction and analysis holding times were met for all samples and analytes.

Method Blanks

Method blanks were provided for all analyses. All method blanks met QC acceptance criteria, except in the following:

2-Methylnaphthalene was detected in the blank at .0029 ug/L. Data was flagged with a "J" as an estimated value.

Phenanthrene was detected in the blank at .0016 ug/L. Detected data was flagged with a "J" as an estimated value.

Cadmium was detected in the blank at .46 ug/L. Detected data was flagged with a "J" as an estimated value.

Total Organic Carbon was detected in the blank at 0.29 mg/L. The data was flagged with a "J" as an estimated value.

Surrogate Recovery

Surrogate recovery values met QC control limits.

Laboratory Control Samples

Percent recovery and relative percent difference (RPD) values for the laboratory control samples (LCS) and LCS duplicates met frequency criteria and QC control limits.

Matrix Spike Samples

Not applicable.