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NASJRB WILLOW GROVE
5090.3a

VALIDATED DATA PACKAGE, FA17179A, NAS WILLOW GROVE PA
1/28/2015
RESOLUTION CONSULTANTS



Data Validation Report

Project: NAS JRB Willow Grove, PA

Laboratory: Accutest Laboratories

Job Number: FA17197a

Analyses/Method: PFOS and PFOA by Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS)/ EPA Method 537 modified

Validation Level: Limited

Resolution Consultants 60276503.SI.RP
Project Number:

Prepared by: Paula DiMattei/Resolution Consultants Completed on: 8/27/2014

Reviewed by: Lori Herberich /Resolution Consultants

File Name: Willow Grove FA17197a_PFOA and PFOS

SUMMARY

The sample listed below was collected by Resolution Consultants from the NAS JRB Willow Grove, PA site on August 4, 2014.

Sample ID	Matrix/Sample Type
CSO TAP	Tap water

Data validation activities were conducted with reference to:

- Accutest Laboratories SOP: Analysis of Perfluorinated Alkyl Acids by LC/MS/MS; MS 014.1, Rev. Date: 05/14
- EPA New England, Environmental Data Review Program Guidance (USEPA, April 2013);
- USEPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data review (USEPA, September 2011);
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008);
- Quality Systems Manual (QSM) for Environmental Laboratories, Version 4.2 (DoD, October 2010); and
- the project-specific Sampling and Analysis Plan.

In the absence of method-specific information, laboratory quality control (QC) limits, project-specific requirements and/or professional judgment were used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

- ✓ Data completeness (chain-of-custody (COC)/sample integrity)
- ✓ Holding times and sample preservation
- ✓ Initial calibration/initial and continuing calibration verification

- ✓ Laboratory method blanks/equipment blanks
- ✓ Surrogate recoveries
- ✓ Matrix spike (MS) and/or matrix spike duplicate (MSD) results
- ✓ Laboratory control sample (LCS) results
- NA Field duplicate results
- ✓ Internal standard results
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (X) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Qualification of the data was not required.

RESULTS

Data Completeness

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times/Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Initial Calibration/Initial and Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD) or correlation coefficient (r)/coefficient of determination (r²) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met; and
- the continuing calibration verification standard (CCV) frequency and method percent recovery criteria were met.

The QC acceptance criteria were met.

Laboratory Method Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks are evaluated as to whether there are contaminants detected above the method detection limit (DL).

The field and equipment blanks (FB_081414 and EB_081414) associated with the sample in this data set was reported in SDG FA17197. Target compounds were not detected in the laboratory blanks, field blank or equipment blanks associated with the sample in this data set.

Surrogate Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. The surrogates were diluted out of sample CSO-TAP. No data validation actions were taken on this basis.

MS/MSD Results

MS/MSD analyses were performed on sample CSO-TAP. PFOA and PFOS were detected in the native sample at a concentration greater than 4x the spike concentration; therefore, the MS/MSD analyses were not evaluated. No data validation actions were taken on this basis.

LCS Results

The LCS %Rs were reviewed for conformance. All QC acceptance criteria were met.

Field Duplicate Results

Field duplicate samples were not submitted with this data set. No data validation actions were taken on this basis.

Internal Standard Results

The internal standard (IS) results were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

If applicable, compounds detected at concentrations less than the limit of quantitation (LOQ) but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

QUALIFICATION ACTIONS

No sample results were qualified as a result of the validation.