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NASJRB WILLOW GROVE  
5090.3a

VALIDATED DATA PACKAGE, FA17133, NAS WILLOW GROVE PA  
1/28/2015  
RESOLUTION CONSULTANTS



## Data Validation Report

Project: NAS JRB Willow Grove, PA

Laboratory: Accutest Laboratories

Job Number: FA17133

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: Robert Kennedy/Resolution Consultants Completed on: 8/18/2014

Reviewed by: Paula DiMattei /Resolution Consultants

File Name: Willow Grove FA17133\_PFOs and PFOA

### SUMMARY

The samples listed below were collected by Resolution Consultants from the NAS JRB Willow Grove, PA site on July 31, 2014.

Sample ID	Matrix/Sample Type
HTA WELL 26	Groundwater
HTA WELL 40	Groundwater

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/initial calibration blanks/equipment blanks
- ✓ Surrogate recoveries
- NA 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 (r<sup>2</sup>) 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/Initial Calibration Blanks/Equipment Blanks**

Laboratory method blanks, initial calibration blanks, and equipment rinsate blanks are evaluated as to whether there are contaminants detected above the method detection limit (DL). Target compounds were not detected in the laboratory blanks. Equipment blanks were not submitted with the samples in this data set.

**Surrogate Recoveries**

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met or qualification of the data was not required.

**MS/MSD Results**

MS/MSD analyses were not performed on a sample in this data set; no validation action was required.

**LCS Results**

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

**Field Duplicate Results**

Field duplicate samples were not submitted; no validation action was required.

**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.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and LODs were adjusted accordingly by the laboratory.

**QUALIFICATION ACTIONS**

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