UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

AUG 26 1991

MEMORANDUM

SUBJECT: Data Review Comments for Region VII Data

FROM: Larry Marchin
CLP-TPO, Region VII

TO: Edward Kantor
EMSL-LV

Attached are the review comments for CLP data analyzed for Region VII under SAS No. (lab) 6568-G (AATS).

If you have any comments or questions regarding this review, please call me at FTS 276-5170.

Attachments

cc: SMO Action: _____ FYI: X

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Superfund

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DPO: [ ] ACTION [ ] FYI Region VII

ORGANIC DATA ASSESSMENT SUMMARY

CASE NO. 6568-G LABORATORY AATS

SDG NO. 6568G-010 DATA USER

SOW 2/88 REVIEW COMPLETION DATE 8/23/91

NO. OF SAMPLES 5 WATER 1 SOIL ____ OTHER

REVIEWER [ ] ESD [X] ESAT [ ] OTHER, CONTRACT/CONTRACTOR

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES	O	O		
2. GCMS TUNE/GC PERFORMANCE	O			
3. INITIAL CALIBRATIONS	O			
4. CONTINUING CALIBRATIONS	X			
5. FIELD BLANKS ("F" = N/A)	O			
6. LABORATORY BLANKS	X			
7. SURROGATES	O			
8. MATRIX SPIKE/DUPLICATES				
9. REGIONAL QC ("F" = N/A)				
10. INTERNAL STANDARDS				
11. COMPOUND IDENTIFICATION				
12. COMPOUND QUANTITATION				
13. SYSTEM PERFORMANCE				
14. OVERALL ASSESSMENT				

O = No problems or minor problems that do not affect data usability.
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as estimated.
Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

ENVIRONMENTAL SERVICES ASSISTANCE TEAM -- ZONE II

ICF Technology Incorporated

NSI Technology Services Corp.

The Bionetics Corp.

ESAT Region VII
NSI Tech. Serv. Corp.
25 Funston Road
Kansas City, KS 66115
(913) 551-5000

TO: Barry Evans
Data Review Task Monitor
THRU: Harold Brown, Ph.D.
ESAT Deputy Project Officer, EPA

FROM: David J. Hickey
ESAT Data Reviewer
THRU: Ronald A. Ross
ESAT Team Manager

DATE: August 16, 1991
SUBJECT: Review of organic data for **Cedar Falls FMGP**

TID# 07-9103-535
ASSIGNMENT# 924
ICF ACCT# 26-535-02
NSI S.O.# 1073-535
ESAT Document No. ESAT-VII-535-0175

These data were reviewed primarily according to the "Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses," February 1988 revision with changes given in the Region VII Organic Data Review Training Manual and EPA memorandums.

The following comments and attached data sheets are a result of the ESAT review, according to EPA policies, of the following data from the contract laboratory.

CASE NO.: 6568G
SITE: Cedar Falls FMGP
REVIEWER: David J. Hickey

LABORATORY: AATS
METHOD NO.: CS0288A
EPA ACTIVITY NO.: DSX72
MATRIX: WATER/SOIL

VOLATILES (WATER)		VOLATILES (SOIL)	
SMO Sample No.	EPA Sample No.	SMO Sample No.	EPA Sample No.
6568G-012	DSX72103	6568G-010	DSX72010F
6568G-013	DSX72104		
6568G-014	DSX72105F		
6568G-015	DSX72106F		
6568G-016	DSX72952P		

SEMIVOLATILES
(WATER)

SMO Sample No.	EPA Sample No.
6568G-027	DSX72103
6568G-028	DSX72104
6568G-029	DSX72106F
6568G-030	DSX72948P

GENERAL

This data review assignment covers 5 WATER, and 1 SOIL samples analyzed for VOLATILES, and 4 WATER samples analyzed for SEMIVOLATILES for SAS number 6568G. There was four field blanks, four method blanks, and two performance evaluation samples included with this assignment.

1. Holding Times and Preservation

Several water samples exceeded the specified Aromatic holding times for volatiles by 3 days or less but no coding resulted. No holding times have been established for soil samples. Extraction and analysis of the waters for semivolatiles was completed within the specified time limit.

2. GC/MS Tuning

All relative ion abundances were within the established control limits.

3. Initial and Continuing Calibration

Volatiles:

%RSD was out of control for Chloromethane, Bromomethane, and 2-Butanone, but since sample results were non-detect for these compounds, no qualification was necessary. %D was out of control for Chloromethane, Methylene Chloride, Vinyl Acetate, Trans-1,3-Dichloropropene, 2-Butanone, 1,1,1-Trichloroethane, 4-Methyl-2-Pentanone, 2-Hexanone, Dibromochloromethane, and Bromoform. As a result, sample DSX72952P was J-coded for Dibromochloromethane, and sample DSX72010F was J-coded for 2-Butanone.

Semivolatiles:

%RSD was out of control for 4-Chloroaniline, Hexachlorocyclopentadiene, 3,3'-Dichlorobenzidine, and Benzo(k)Fluoranthene, but since all samples were non-detect for these compounds, no qualification was necessary. %D was out of control for Benzoic acid, 4-Chloroaniline, 3-Nitroaniline, 3,3'-Dichlorobenzidine, and 4-Nitrophenol, but since all samples were non-detect for these compounds, no qualification was necessary.

4. Internal Standard Response

All internal standard criteria were within control limits.

5. Blanks

Volatiles:

Common contaminants (Methylene Chloride, Acetone and Chloroform) were found in some of the method blanks at levels below the CRQL. Sample DSX72105F was U-coded for Methylene Chloride since results for that compound were not above 10x the blank contamination. Although Methylene Chloride and Acetone were found in one of the water field blanks, no samples were qualified. Acetone in the soil field blank did not qualify any samples because the field blank was the only soil sample.

Semivolatiles:

Both the method blank and the field blank were free of comtamination.

6. Surrogate Recovery

All surrogate compound recoveries were within control limits.

7. Matrix Spike/Matrix Spike Duplicate Recovery

Volatiles:

The Matrix spike/Matrix spike duplicate recoveries were within control limits. All RPDs were within control limits. There was no MS/MSD run on the soil sample.

Semivolatiles:

The Matrix spike/Matrix spike duplicate recoveries were within control limits. All RPDs were within control limits.

8. Performance Evaluation Sample

Volatiles:

Recovery of spiked analytes was very good. Acetone, which was also present in the field blank, was the only additional compound found in the performance sample. No data were qualified based on performance evaluation sample recoveries.

Semivolatiles:

Recovery of spiked analytes was low, with one compound (Phenol) not recovered at all. Because the sample was diluted (reason unknown), several spiked compounds were recovered, but at levels below the CRQL and were, thus, not reported. No data were qualified based on performance evaluation sample recoveries.

9. Duplicates

There were no duplicate samples included with this package.

10. Compound Identification and Quantitation

Due to the requested review level, results listed on the summary forms were used for the review. These results were not checked against the raw data for accuracy, and calculations were not verified. All positive results found below the CRQL were raised to the CRQL according to Regional policy and coded U.

11. Summary

The lab was instructed to analyze the water and soil samples for VOA analytes, and additionally the water samples for Semivolatiles analytes (package was SAS because of required quick turn-a-round). Calibration outliers were found for many compounds, resulting in data for two samples in the volatiles fraction being J-coded. Common laboratory contaminants were found in the method blanks for volatiles, qualifying one sample. All other QC was acceptable.