### ITS REWORK DATA VERIFICATION REPORT

for

# samples collected from

# CAMP STANLEY STORAGE ACTIVITY

**BOERNE, TEXAS**Data Verifiers: Michelle Wolfe & Tammy Chang

Parsons

## INTRODUCTION

The following data verification summary report covers environmental soil samples and associated field quality control (QC) samples collected from the Camp Stanley (for ITS Rework) on March 17, 2000. Samples from the following Sample Delivery Group (SDG) were analyzed for semivolatile organic compounds (SVOCs) and volatile organic compounds (VOCs):

32244

Field quality control samples collected were one trip blank; matrix spike/matrix spike duplicates (MS/MSD); and field duplicates. During the initiation of this project, it was determined that ambient blanks were not necessary due to the absence of a source at the site. The trip blank was analyzed for volatile organics only. All other field quality control samples were analyzed for the same parameters as their associated samples.

All samples were collected by Parsons. All analyses were performed by APPL, Inc. following procedures outlined in the AFCEE QAPP, version 3.0.

# **EVALUATION CRITERIA**

The data submitted by the laboratory has been reviewed and verified following the guidelines outlined in the AFCEE QAPP, version 3.0. Information reviewed in the data packages include sample results; the summary of laboratory quality control results; case narrative; raw data; and chain-of-custody forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the AFCEE QAPP were met.

### **SVOC SDG 32244**

#### General

This SDG consisted of three (3) confirmation environmental soil samples. The samples were collected on March 17, 2000 and analyzed for semivolatile organic compounds (SVOCs).

SVOC analyses were performed using United States Environmental Protection Agency (USEPA) SW846 Method 8270C. All samples for this SDG were analyzed following the procedures outlined in the AFCEE QAPP. All samples collected were prepared and analyzed within the holding time required by the method.

# **Accuracy**

Accuracy was evaluated using the %R results for the MS/MSD samples; LCS samples; and surrogate spikes. There was no MS/MSD analyzed for this SDG.

All LCS and surrogate %Rs were within acceptance criteria.

### **Precision**

Precision was evaluated using the Relative Percent Difference (RPD) results obtained from MS/MSD results; and the field duplicate analyte values. There was no MS/MSD analyzed for this SDG. There were no field duplicates analyzed for this SDG.

# **Completeness**

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All results were considered usable. The completeness for this SDG is 100% compared to the minimum acceptance limit of 90%.

## Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the chain-of-custody procedures to those described in the AFCEE QAPP;
- Comparing actual analytical procedures to those described in the AFCEE QAPP;
- Evaluating holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

All samples in this SDG were analyzed following chain-of-custody forms (COCs) and analytical procedures described in the AFCEE QAPP. All samples were prepared and analyzed within the holding time required for the analysis.

- All instrument performance check criteria was met.
- All initial calibration criteria were met.
- All continuing calibration criteria were met.
- All second source verification criteria were met.
- All internal standard criteria were met.

There was one method blank associated with the SVOC analyses in this SDG. The blank was free of any SVOCs above the RL.

### **VOC SDG 32244**

#### General

This SDG consisted of twenty (20) samples, including fourteen (14) confirmation environmental soil samples, two field duplicate soil samples, one set of matrix spike/matrix spike duplicate samples, one equipment blank sample and one trip blank sample. The samples were collected on March 17, 2000 and analyzed for volatile organic compounds (VOCs).

VOC analyses were performed using United States Environmental Protection Agency (USEPA) SW846 Method 8260B. All samples for this SDG were analyzed following the procedures outlined in the AFCEE QAPP. All samples collected were prepared and analyzed within the holding time required by the method.

# Accuracy

Accuracy was evaluated using the %R results for the MS/MSD samples; LCS samples; and surrogate spikes. Sample RW-B22-SS05 (0.0-0.5') was analyzed as the MS/MSD sample for this SDG.

All MS/MSD %Rs were within acceptance criteria except for as follows:

**Sample RW-B22-SS05 (0.0-0.5')** 

Analyte	MS %R	MSD %R	QC
1,2,3-trichlorobenzene	44.8	38.8	65-147
1,2,4-trichlorobenzene	53.7	47.8	65-145
Bromomethane	-	56.7	62-135
Cis-1,3-dichloropropene	-	59.7	64-135
Hexachlorobutadiene	-	64.2	65-135
Isopropylbenzene	140	143	65-135
Methylene chloride	-	143	65-135
Naphthalene	44.8	40.3	65-135

<sup>-</sup> The %R was compliant

The results for the non-compliant analytes in the associated samples from the same site and of similar matrix as the MS/MSD sample were flagged "M" to indicate a matrix effect was present.

All LCS and surrogate %Rs were within acceptance criteria.

## **Precision**

Precision was evaluated using the Relative Percent Difference (RPD) results obtained from MS/MSD results; and the field duplicate analyte values. Sample RW-B22-SS05 (0.0-0.5') was analyzed as the MS/MSD sample for this SDG. Sample RW-B22-SS05 (0.0-0.5') FD was the field duplicate of sample RW-B22-SS05 (0.0-0.5').

All MS/MSD and field duplicate RPDs were within acceptance criteria.

# **Completeness**

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All results were considered usable. The completeness for this SDG is 100% compared to the minimum acceptance limit of 90%.

## Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the chain-of-custody procedures to those described in the AFCEE QAPP;
- Comparing actual analytical procedures to those described in the AFCEE QAPP;
- Evaluating holding times; and
- Examining field and laboratory blanks for cross contamination of samples during collection or analysis.

All samples in this SDG were analyzed following chain-of-custody forms (COCs) and analytical procedures described in the AFCEE QAPP. All samples were prepared and analyzed within the holding time required for the analysis.

- All instrument performance check criteria was met.
- All initial calibration criteria were met.
- All continuing calibration criteria were met.
- All second source verification criteria were met.
- All internal standard criteria were met except for as follows:

Sample	Internal Standard	%R	QC
RW-B5-SS03 (0.0-0.5')	1,4-dichlorobenzene-d4	45.8	50-200

AFCEE specified that no action was to be taken for the internal standard outliers for the samples.

There were three method blanks, one equipment blank and one trip blank associated with the VOC analyses in this SDG. All blanks were free of any VOCs above the RL.