

ITS REWORK DATA VERIFICATION REPORT
for
samples collected from
CAMP STANLEY STORAGE ACTIVITY
BOERNE, TEXAS

Data Verifiers: Michelle Wolfe & Tammy Chang
Parsons ES

INTRODUCTION

The following data verification summary report covers environmental soil samples and associated field quality control (QC) samples collected from the Camp Stanley CSSA Site (under ITS rework) on March 21, 2000. All samples in the following laboratory Sample Delivery Group (SDG) were analyzed for semivolatile organic compounds (SVOCs) and volatile organic compounds (VOCs):

32261

Field quality control samples collected were trip blank, equipment 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 Engineering Science (Parsons ES). 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 32261

General

This SDG consisted of sixteen (16) samples, including twelve (12) confirmation environmental soil samples, one field duplicate soil sample, one set of matrix spike/matrix spike duplicate samples and one equipment blank. The samples were collected on March 21, 2000 and analyzed for semivolatile organic compounds (SVOCs). Five of the samples were analyzed for di-n-butylphthalate only.

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 times required by the method.

Accuracy

Accuracy was evaluated using the %R results for the MS/MSD samples; LCS samples; and surrogate spikes. Sample RW-B27-SS03 (0.0-0.5') was used as the MS/MSD sample for this SDG.

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

Sample RW-B27-SS03 (0.0-0.5')

Analyte	MS %R	MSD %R	QC
2,4-dinitrophenol	8.8	6.5	25-161
benzoic acid	5.4	4.7	25-172
pentachlorophenol	34.1	35.9	38-146

The results for the non-compliant analytes in samples from site B27 with similar matrix as the MS/MSD sample were flagged "M" to indicate a matrix effect was present. All LCS %R for soil samples were within acceptable criteria.

All LCS %Rs for the water samples were within acceptance criteria except for as follows:

LCS – water – 3/29/00

Analyte	LCS %R	QC
4-nitrophenol	24.4	25-131
benzoic acid	18.4	25-162
hexachlorocyclopentadiene	31.4	41-125

The 4-nitrophenol, benzoic acid and hexachlorocyclopentadiene results in the affected sample were considered unusable and flagged “R”.

The surrogate %Rs were within acceptance criteria except for the water method blank. Three surrogate %Rs were less than ten percent. The sample surrogate %Rs were compliant.

Precision

Precision was evaluated using the Relative Percent Difference (RPD) results obtained from MS/MSD results; and the field duplicate analyte values. Sample RW-B27-SS03 (0.0-0.5’) was used as the MS/MSD sample for this SDG. Sample RW-B27-SS03 (0.0-0.5’) FD was the field duplicate of sample RW-B27-SS03 (0.0-0.5’).

The MS/MSD RPDs were within acceptance criteria except for as follows:

Sample RW-B27-SS03 (0.0-0.5’)

Analyte	RPD	QC
2,4-dinitrophenol	30.8	30
4-nitrophenol	34.1	30

The 2,4-dinitrophenol and 4-nitrophenol results in samples from site B27 with similar matrix as the MS/MSD sample were flagged “M” to indicate a matrix effect was present.

The 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.

The 4-nitrophenol, benzoic acid and hexachlorocyclopentadiene results in the trip blank sample were considered unusable and flagged “R” due to low LCS %Rs. The completeness for this SDG is 99.6% 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 times required for the analysis.

- All instrument performance check criteria were 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 were two method blanks and one equipment blank associated with the SVOC analyses in this SDG. The blanks were free of SVOCs above the RL.

VOC SDG 32261

General

This SDG consisted of nine (9) samples, including seven (7) confirmation environmental soil samples, one field duplicate soil sample and one trip blank sample. The samples were collected on March 21, 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 times 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 analysis in 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 analysis in this SDG. Sample RW-B27-SB03 (0.5-1.0') FD was the field duplicate of sample RW-B27-SB03 (0.5-1.0').

The 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 100.0% 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 times required for the analysis.

- All instrument performance check criteria were 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 were three method blanks and one trip blank associated with the VOC analyses in this SDG. The blanks were free of VOCs above the RL.