

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

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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 16, 2000. Samples in the following laboratory Sample Delivery Group (SDG) were analyzed for semivolatile organic compounds (SVOCs) and volatile organic compounds (VOCs):

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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 blanks were 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 32238

General

This SDG consisted of fourteen (14) samples, including ten (10) confirmation environmental soil samples, one field duplicate soil sample, one set of matrix spike/matrix spike samples and one equipment blank sample. The samples were collected on March 16, 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 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-B34-SB03 (0.0-0.5') was used as the MS/MSD sample for this SDG.

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

Sample RW-B34-SB03 (0.0-0.5)

Analyte	MS %R	MSD %R	QC
2,4-dinitrophenol	18.1	20.6	25-161
3,3'-dichlorobenzidine	4.2	12.5	25-175
4-chloroaniline	26.2	25.0	35-146
4-nitroaniline	29.4	-	30-153
benzoic acid	6.9	8.8	25-172

- The %R was compliant.

The results for the non-compliant analytes in the associated samples 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-B34-SB03 (0.0-0.5') was used as the MS/MSD sample for this SDG. Sample RW-B34-SB03 (0.0-0.5') FD was the field duplicate of sample RW-B34-SB03 (0.0-0.5').

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

Sample RW-B34-SB03 (0.0-0.5')

Analyte	RPD	QC
3,3'-dichlorobenzidine	99.6	30
4-nitrolaniline	49.6	30

The results for the non-compliant analytes in the associated samples 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.

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
- 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 with the holding times 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 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 32238

General

This SDG consisted of fifteen (15) samples, including ten (10) confirmation environmental soil samples, one field duplicate soil sample, one set of matrix spike/matrix spike duplicate samples, one equipment blank samples and one trip blank sample. The samples were collected on March 16, 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. Sample RW-B34-SB03 (0.0-0.5') was used as the MS/MSD sample in this SDG.

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

Sample RW-B34-SB03 (0.0-0.5')

Analyte	MS %R	MSD %R	QC
1,2,3-trichlorobenzene	32.7	34.5	65-147
1,2,4-trichlorobenzene	36.4	40.0	65-145
1,2-DCB	60.0	61.8	65-135
1,3-DCB	61.8	-	65-135
1,4-DCB	61.8	61.8	65-135
bromomethane	36.4	36.4	62-135
Chloromethane	-	60.0	65-135
Cis-1,3-dichloropropene	40.0	41.8	64-135
Hexachlorobutadiene	43.6	47.3	65-135
Naphthalene	41.1	39.3	65-135
Trans-1,3-dichloropropane	40.0	41.8	56-135

- The %R was compliant.

The results for the non-compliant analytes in the associated samples from the same site 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-B34-SB03 (0.0-0.5') was used as the MS/MSD sample in this SDG. Sample RW-B34-SBS03 (0.0-0.5') FD was the field duplicate of sample RW-B34-SB03 (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 100.0% 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
- 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 with the holding times 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 were three method blanks, one equipment blank and one trip blank associated with the VOC analyses in this SDG. The method and trip blanks were free of VOCs above the RL. The equipment blank contained the following:

Blank ID	Analyte	Concentration
RW-RL17-EB09	Bromodichloromethane	2.00 µg/l
	chloroform	39.00 µg/l

No action was needed since bromodichloromethane and chloroform were not present in the associated samples.