### TO19 DATA VERIFICATION SUMMARY REPORT

## for samples collected from

### CAMP STANLEY STORAGE ACTIVITY

### **BOERNE, TEXAS**

Data Verification by: Katherine LaPierre and Tammy Chang Parsons - Austin

#### INTRODUCTION

The following data verification summary report covers soil samples collected from Camp Stanley Storage Activity (CSSA) under Task Order 0019 on February 3 and 5, 2004. The samples in the following Sample Delivery Group (SDG) were analyzed for volatile organic compounds (VOCs) and metals:

43685

The field quality control (QC) samples collected in association with this SDG included two matrix spike/matrix spike duplicate (MS/MSD) pair, two field duplicates (FD) and one trip blank. No ambient blanks were collected. During the initiation of this project, it was determined that ambient blanks were not necessary due to the absence of a source at these sites.

All samples were collected by Parsons and analyzed by APPL Inc. following the procedures outlined in the Statement of Work and CSSA QAPP, version 1.0. The cooler associated with this SDG was received by the laboratory at a temperature of  $5.0^{\circ}$  C which is within the  $2-6^{\circ}$  C range recommended by the QAPP.

### **EVALUATION CRITERIA**

The data submitted by the laboratory has been reviewed and verified following the guidelines outlined in the CSSA QAPP, version 1.0. Information reviewed in the data packages included sample results; field and laboratory quality control results; case narratives; raw data; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the CSSA QAPP, version 1.0, were met.

## **VOLATILES**

#### General

The VOC portion of this SDG consisted of nine (9) samples, including five environmental soil samples, one MS/MSD pair, one field duplicate and one trip blank. Only the samples collected from B23 required VOC analysis. The samples were collected on February 3 and 5, 2004 and were analyzed for a reduced list of VOCs, which included benzene, dichlorodifluoromethane, ethylbenzene, toluene, m/p-xylenes and o-xylenes. The VOC analyses were performed according to the United States Environmental Protection Agency (USEPA) SW846 Method 8260B.

All samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

The soils were analyzed in a single batch and the trip blank was analyzed in a separate water batch.

## Accuracy

Accuracy was evaluated using the percent recovery (%R) obtained from the laboratory control spike (LCS) and spike duplicate (LCSD) samples, the MS/MSD samples, and the surrogate spikes. Sample B23-SW04 was designated for MS/MSD analysis on the COC.

The soil batch contained an LCS only, while the water batch contained a LCS/LCSD pair. All LCS and LCSD recoveries were within acceptance criteria.

All MS/MSD recoveries were within acceptance criteria, except for the following:

Analyte	MS %R	MSD %R	Criteria
Ethylbenzene	56.4	(83.6)	
m/p-Xylenes	53.0	(82.0)	65-135%
o-Xylene	54.2	(82.2)	

() indicates the recovery met criteria.

All sample results for the non-compliant analytes were flagged "M" in accordance with the CSSA QAPP.

All surrogate spike recoveries were within acceptance criteria.

## Precision

Precision was evaluated using the relative percent difference (RPD) obtained from the LCS/LCSD samples (for water only), the MS/MSD samples and field duplicate samples. Sample B23-SW02 was collected in duplicate. The second sample from this location was submitted and analyzed as a field duplicate.

All LCS/LCSD RPDs were within acceptance criteria for waters.

All MS/MSD RPDs were within acceptance criteria, except for the following:

Analyte	RPD	Criteria
Ethylbenzene	38.9	
m/p-Xylenes	43.0	$RPD \le 30$
o-Xylene	41.1	

All associated sample results were previously flagged "M" due to the failing MS recoveries, so no additional corrective action was necessary.

All analytes were non-detect in both the parent and field duplicate of sample B23-SW02, so the RPD calculation was not applicable.

## Representativeness

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

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

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All instrument tune criteria were met.
- Two initial calibrations (ICALs) were performed, one for soils and one for waters. All QAPP criteria were met for both ICALs.
- All second source verification criteria were met. The LCS and LCSD were analyzed using a secondary source.
- All water calibration verification criteria were met. No CCV analyses were performed for soils since the samples were analyzed in the same batch as the ICAL.
- All internal standard criteria were met

Two method blanks were analyzed in association with the VOC analyses in this SDG, one for the soil batch and one for the water batch. No target analytes were detected at or above the RL in the method blanks.

## **Completeness**

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

All VOC results for the samples in this SDG were considered usable. The completeness of the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.

### **ICP METALS**

## General

The ICP metals portion of this SDG consisted of fifteen (15) samples, including nine environmental soil samples, two MS/MSD pairs and two field duplicates. The samples were collected on February 3 and 5, 2004 and were analyzed for a reduced list of ICP metals. The COC indicated that the samples collected from B25 required zinc only. However, the lab reported the same list of metals (barium, copper, nickel and zinc) for all samples. Only the zinc data was needed from B25, but all data provided by the lab was verified.

The ICP metals analyses were performed using USEPA SW846 Method 6010B. The samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. The samples were prepared and analyzed within the holding time required by the method.

## **Accuracy**

Accuracy was evaluated using the %R obtained from the LCS/LCSD samples and MS/MSD samples. Sample B23-SW04 and sample B25-EM03 were designated for MS/MSD analysis on the COC.

All LCS/LCSD recoveries were within acceptance criteria.

All MS/MSD recoveries were within acceptance criteria for the MS/MSD analyzed on sample B23-SW04, except for the following:

Parent	Metal	MS %R	MSD %R	Criteria
B23-SW04	Zinc	73.0	(76.1)	75-125%

All zinc results were flagged "M" in accordance with the CSSA QAPP.

All MS/MSD recoveries were within acceptance criteria for the MS/MSD analyzed on sample B23-EM03, except for the following:

Parent	Metal	MS %R	MSD %R	Criteria
B23-EM03	Barium	71.7	(75.7)	75-125%

All barium results were flagged "M" in accordance with the CSSA QAPP.

#### Precision

Precision was evaluated using the RPD obtained from the LCS/LCSD samples, the MS/MSD samples, and the field duplicate samples.

All LCS/LCSD and MS/MSD RPDs were within acceptance criteria.

For the FD pair analyzed on sample B23-SW02, the RPDs were as follows:

Parent	Metal	FD RPD	Criteria
	Barium	6.5	
B23-SW02	Copper	4.8	RPD < 20
D23-3 W 02	Nickel	3.8	$\text{KFD} \leq 20$
	Zinc	31.8	

All field duplicate RPDs met criteria, with the exception of zinc. No corrective action was necessary because all zinc results were previously flagged "M" due to the failing MS recovery and the "M" flag supercedes the "J" flag in the CSSA QAPP flag hierarchy.

For the FD pair analyzed on sample B25-SW05, the RPDs were as follows:

Parent	Metal	FD RPD	Criteria
	Barium	5.7	
B25-SW05	Copper	0.5	$RPD \le 20$
D23-3 W 03	Nickel	6.6	$\text{RFD} \leq 20$
	Zinc	56.8	

All field duplicate RPDs met criteria, with the exception of zinc. No corrective action was necessary because all zinc results were previously flagged "M" due to the failing MS recovery and the "M" flag supercedes the "J" flag in the CSSA QAPP flag hierarchy.

# Representativeness

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

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

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All initial and continuing calibration verification criteria were met.
- All second source calibration criteria were met. The ICV was prepared using a secondary source.
- All interference check criteria were met.
- A dilution test (DT) was analyzed on sample B25-SW06. All metals met criteria in the dilution test except for the following:

Metal	%D	Criteria
Barium	11.7	
Copper	13.2	$%D \le 10$
Nickel	39.8	

All barium results were previously flagged "M" due to the failing MS recovery, so no corrective action was necessary for this metal. Copper and nickel both met criteria in the MS/MSDs, so the results for these metals were flagged "J" as estimated in all samples in accordance with the CSSA QAPP.

• The laboratory also analyzed a post digestion spike (PDS) on sample B25-SW06. All PDS recoveries were within acceptance criteria.

One method blank and several calibration blanks were analyzed in association with the ICP analyses in this SDG. All blanks were free of target metals at or above the RL.

# Completeness

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

All ICP metals results for the samples in this SDG were considered usable. The completeness for the ICP metals portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.

### ARSENIC

#### General

The arsenic portion of this SDG consisted of seven (7) samples, including four environmental soil samples, one MS/MSD pair and one field duplicate. The samples were collected on February 3 and 5, 2004 and were analyzed for arsenic using USEPA SW846 Method 7060A. Only the samples collected from B25 required analysis for arsenic.

The samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. The samples were prepared and analyzed within the holding time required by the method.

It should be noted that all but one of the samples were analyzed at a dilution due to the high level of arsenic present.

### Accuracy

Accuracy was evaluated using the %R obtained from the LCS/LCSD samples and the MS/MSD samples. Sample B25-EM03 was designated for MS/MSD analysis on the COC.

Both LCS/LCSD recoveries were within acceptance criteria.

The MS/MSD recoveries failed to meet criteria as follows:

Parent	Metal	MS %R	MSD %R	Criteria
B25-EM03	Arsenic	-107.6	-128.9	74-120%

The anomalous recoveries were due to the fact that the parent sample concentration was significantly greater than (more than five times) the spike amount. The arsenic results for all samples were flagged "M" in accordance with the CSSA QAPP.

## **Precision**

Precision was evaluated using the RPD obtained from the LCS/LCSD samples, the MS/MSD samples, and the field duplicate analyte results. Sample B25-SW05 was collected in duplicate. The second sample from this location was submitted and analyzed as a field duplicate.

Both the LCS/LCSD and the MS/MDS RPD were within acceptance criteria.

The field duplicate RPD failed to meet criteria as follows:

Metal	FD RPD	Criteria
Arsenic	53.5	$RPD \le 25$

No corrective action was necessary because all arsenic results were previously flagged "M" due to the failing MS/MSD recoveries and the "M" flag supercedes the "J" flag in the CSSA QAPP flag hierarchy.

# Representativeness

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

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

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All initial and continuing calibration verification criteria were met.
- All second source calibration criteria were met. The ICV was prepared using a secondary source.
- The dilution test (DT) was analyzed on sample B25-EM03. Arsenic failed criteria as follows:

Metal	%D	Criteria
Arsenic	34.2	%D ≤ 10

No corrective action was necessary because all sample results for arsenic were previously flagged "M" due to the failing MS/MSD recoveries.

• The laboratory also analyzed a PDS on sample B25-EM03. Arsenic met criteria in the PDS with a recovery of 93.6%.

One method blank and several calibration blanks were analyzed in association with the arsenic analyses in this SDG. All blanks were free of arsenic at or above the RL.

## Completeness

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

All arsenic results for the samples in this SDG were considered usable. The completeness for the arsenic portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.

### **LEAD**

## General

The lead portion of this SDG consisted of eight (8) samples, including five environmental soil samples, one MS/MSD pair and one field duplicate. The samples were collected on February 3 and 5, 2004 and were analyzed for lead using USEPA SW846 Method 7421. Only the samples collected from B23 required analysis for lead.

The samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. The samples were prepared and analyzed within the holding time required by the method.

It should be noted three samples required a dilution due to the high level of lead present.

## **Accuracy**

Accuracy was evaluated using the %R obtained from the LCS/LCSD samples and MS/MSD samples. Sample B23-SW04 was designated for MS/MSD analysis on the COC

All LCS/LCSD and MS/MSD recoveries were within acceptance criteria.

#### Precision

Precision was evaluated using the RPD obtained from the LCS/LCSD samples, the MS/MSD samples, and the field duplicate analyte concentrations. Sample B23-SW02 was collected in duplicate. The second sample from this location was submitted and analyzed as a field duplicate.

All LCS/LCSD and MS/MSD RPDs were within acceptance criteria.

The field duplicate RPD met criteria at 5.95%.

## Representativeness

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

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

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All initial and continuing calibration verification criteria were met.
- All second source calibration criteria were met. The ICV was prepared using a secondary source.

• The dilution test was analyzed on sample B23-SW04. The DT failed to meet criteria as follows:

Metal	%D	Criteria
Lead	15.9	%D ≤ 10

Lead met criteria in the MS/MSD, so all sample results for lead were flagged "J" as estimated in accordance with the CSSA QAPP.

• The laboratory also analyzed a PDS on sample B23-SW04. Lead met criteria in the PDS with a recovery of 90.9%.

One method blank and several calibration blanks were analyzed in association with the lead analyses in this SDG. All blanks were free of lead at or above the RL.

## **Completeness**

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

All lead results for the samples in this SDG were considered usable. The completeness for the lead portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.

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### CAMP STANLEY STORAGE ACTIVITY

### **BOERNE, TEXAS**

Data Verification by: Katherine LaPierre and Tammy Chang Parsons - Austin

### INTRODUCTION

The following data verification summary report covers soil samples collected from Camp Stanley Storage Activity (CSSA) under Task Order 0019 on May 21, 2004. The samples in the following Sample Delivery Group (SDG) were analyzed for volatile organic compounds (VOCs) and metals:

44537

The only field quality control (QC) samples collected in association with this SDG was one trip blank (TB). No ambient blanks were collected. During the initiation of this project, it was determined that ambient blanks were not necessary due to the absence of a source at these sites. The trip blank was analyzed for volatiles only.

All samples were collected by Parsons and analyzed by APPL Inc. following the procedures outlined in the Statement of Work and CSSA QAPP, version 1.0. The cooler associated with this SDG was received by the laboratory at a temperature of 3.0° C which is within the 2-6° C range recommended by the QAPP.

### **EVALUATION CRITERIA**

The data submitted by the laboratory has been reviewed and verified following the guidelines outlined in the CSSA QAPP, version 1.0. Information reviewed in the data packages included sample results; field and laboratory quality control results; calibrations; case narratives; raw data; chain-of-custody (COC) forms and cooler receipt checklists. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the CSSA QAPP, version 1.0, were met.

#### **VOLATILES**

## General

The VOC portion of this SDG consisted of five (5) samples, including four environmental soil samples and one trip blank. The samples were collected on May 21, 2004 and were analyzed for a reduced list of VOCs, which included benzene, toluene, ethylbenzene, m/p-xylenes, o-xylene (BTEX) and dichlorodifluoromethane only.

The reduced list of VOC analytes was based on the results from the RCRA Facility Investigation (RFI) performed at the B-23 site in 2002. During the investigation, only BTEX and dichlorodifluoromethane were found at levels that exceeded background levels. The RFI at site B-30 showed no VOCs detected above background levels.

Therefore, only BTEX and dichlorodifluoromethane were required for the closure sampling performed at these sites.

The VOC analyses were performed in accordance with United States Environmental Protection Agency (USEPA) SW846 Method 8260B.

All samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

## Accuracy

Accuracy was evaluated using the percent recovery (%R) obtained from the laboratory control spike (LCS) and LCS duplicate (LCSD) samples and the surrogate spikes. No sample was designated for MS/MSD analysis on the COC.

The samples were analyzed in two batches, one for soil and one for the water trip blank. The soil batch contained an LCS only. The water batch contained both an LCS and an LCSD. All LCS, LCSD and surrogate spike recoveries were within acceptance criteria.

### Precision

Precision was evaluated using the relative percent difference (RPD) obtained from the LCS/LCSD analyte results. Precision could only be evaluated for the water batch since the soil batch did not contain any duplicate analyses.

All LCS/LCSD RPDs for the water batch were within acceptance criteria.

## Representativeness

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

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

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All instrument tune criteria were met.
- Two initial calibrations were analyzed for this SDG, one for soils and one for waters. All initial calibration criteria were met for both.
- All second source verification criteria were met. The LCS and LCSD were prepared using a secondary source.

- No continuing calibration verification samples were required for the water batch because the trip blank was analyzed immediately following the initial calibration. All continuing calibration verification criteria were met for the soil batch.
- All internal standard criteria were met.

Two method blanks (one soil and one water) and one trip blank were analyzed in association with the VOC analyses in this SDG. No target analytes were detected at or above the RL in the method blanks or trip blank.

## Completeness

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

All VOCs results for the samples in this SDG were considered usable. The completeness of the VOCs portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.

### ICP METALS

### General

The ICP metals portion of this SDG consisted of eight (8) environmental soil samples. The samples were collected on May 21, 2004 and were analyzed for a reduced list of ICP metals. Samples collected from B23 were analyzed for barium, copper, nickel and zinc. Samples from B30 were analyzed for copper, nickel and zinc.

The ICP metals analyses were performed using USEPA SW846 Method 6010B. The samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. The samples were prepared and analyzed in two batches and within the holding time required by the method.

### Accuracy

Accuracy was evaluated using the %R obtained from the LCS/LCSD samples. No sample was designated for MS/MSD analysis on the COC.

The samples in this SDG were analyzed in two batches and each contained an LCS/LCSD pair. All LCS/LCSD recoveries were within acceptance criteria.

## **Precision**

Precision was evaluated using the RPD obtained from the LCS/LCSD.

All LCS/LCSD RPDs were within acceptance criteria.

## Representativeness

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

- Comparing the COC procedures to those described in the CSSA QAPP;
- Comparing actual analytical procedures to those described in the CSSA QAPP;

- Evaluating holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

- There were two initial calibration curves analyzed for ICP metals. Both curves met all initial calibration criteria.
- All initial and continuing calibration verification criteria were met.
- All second source calibration criteria were met. The two ICV samples (one for each ICAL) were prepared using a secondary source.
- All interference check criteria were met.
- Three dilution tests (DT) were analyzed in this SDG. A DT was analyzed on sample B23-SW07 in the batch run May 25, 2004. Copper met criteria with a %D of 9.6 and this DT was not applicable for Zinc since the parent sample concentration was less than 50 times the MDL. Barium and nickel failed to meet criteria as follows:

Metal	%D	Criteria
Barium	12.3	%D < 10
Nickel	29.4	/0D ≤ 10

No MS/MSD was analyzed in this SDG, so the results for barium and nickel were flagged "M" in all samples analyzed in the same batch in accordance with the CSSA QAPP.

A DT was also analyzed on sample B30-SW08 in the batch run May 25, 2004. This DT was not applicable because all metals were less than 50x the MDL in the parent sample.

A DT was analyzed on sample B23-SW06 in the batch run May 26, 2004. This DT was not applicable for copper or zinc because these metals were less than 50x the MDL in the parent sample. The %D failed to meet criteria for barium and nickel as follows:

Metal	%D	Criteria
Barium	14.9	%D ≤ 10
Nickel	23.3	

No MS/MSD was analyzed in this SDG, so the results for barium and nickel were flagged "M" in sample B23-SW06 since this was the only sample in this batch.

• No PDS was required as per the CSSA QAPP.

Two method blanks and several calibration blanks were analyzed in association with the ICP analyses in this SDG. All blanks were free of the target metals at or above the RL.

## Completeness

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

All ICP metals results for the samples in this SDG were considered usable. The completeness for the ICP metals portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.

### **LEAD**

#### General

The lead portion of this SDG consisted of eight (8) environmental soil samples. The samples were collected on May 21, 2004 and were analyzed for lead using USEPA SW846 Method 7421.

The samples in this SDG were analyzed following the procedures outlined in the CSSA QAPP. The samples were prepared and analyzed in two analytical batches and within the holding time required by the method.

It should be noted that all samples except B30-SW08 required dilution due to the high levels of lead present.

## Accuracy

Accuracy was evaluated using the %R obtained from the LCS/LCSD samples. No sample was designated for MS/MSD analysis on the COC.

The samples in this SDG were analyzed in two batches and each contained an LCS/LCSD pair. All LCS/LCSD recoveries were within acceptance criteria.

### Precision

Precision was evaluated using the RPD obtained from the LCS/LCSD samples.

Both LCS/LCSD RPDs were within acceptance criteria.

## Representativeness

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

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

The samples in this SDG were analyzed following the COC and the analytical procedures described in the CSSA QAPP. All samples were prepared and analyzed within the holding time required by the method.

• There were two initial calibrations analyzed for lead. Both curves met all initial calibration criteria.

- All initial and continuing calibration verification criteria were met.
- All second source calibration criteria were met. The two ICV samples (one for each ICAL) were prepared using a secondary source.
- Three dilution tests (DTs) were analyzed for this SDG. A DT was analyzed on sample B30-SW08 in the batch run May 25, 2004. Two DTs were analyzed on samples B23-BOT02 and B23-SW06 in the batch analyzed May 26, 2004. All DTs met criteria for lead.
- No PDS was required as per the CSSA QAPP.

One method blank and several calibration blanks were analyzed in association with the lead analyses in this SDG. All blanks were free of lead at or above the RL.

## Completeness

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

All lead results for the samples in this SDG were considered usable. The completeness for the lead portion of this SDG is 100%, which meets the minimum acceptance criteria of 90%.