



ICF Consulting / Laboratory Data Consultants

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MEMORANDUM

TO: Lisa Hanusiak, Remedial Project Manager
Site Cleanup Section 3, SFD-7-3

THROUGH: Rose Fong, ESAT Task Order Project Officer (TOPO)
Quality Assurance (QA) Program, PMD-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: 68-W-01-028
Technical Direction Form No.: 00905073

DATE: March 2, 2006

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Alhambra
Site Account No.:	09 ES LA01
CERCLIS ID No.:	CAD980818579
Case No.:	34815
SDG No.:	MY2905
Laboratory:	CompuChem (LIBRTY)
Analysis:	Select CLP Dissolved Metals and Dissolved Boron by ICP-AES
Samples:	15 Groundwater Samples (see Case Summary)
Collection Date:	November 14, 15, 16, 17, 18, and 21, 2005
Reviewer:	Stan Kott, ESAT/Laboratory Data Consultants

This report has been reviewed by the EPA TOPO for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Edward Messer, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: FYI Action

SAMPLING ISSUES: Yes No

Data Validation Report

Case No.: 34815
SDG No.: MY2905
Site: Alhambra
Laboratory: CompuChem (LIBRTY)
Reviewer: Stan Kott, ESAT/LDC
Date: March 2, 2006

I. CASE SUMMARY

Sample Information

Samples: MY2905, MY2906, MY2908 through MY2912,
MY2915, and MY2918 through MY2924
Concentration and Matrix: Low Concentration Groundwater
Analysis: Select CLP Dissolved Metals and Dissolved Boron
by ICP-AES
SOW: ILM05.3 and Modification Reference Number 1264.1
Collection Date: November 14, 15, 16, 17, 18, and 21, 2005
Sample Receipt Date: November 15, 16, 17, 18, 19, and 22, 2005
Preparation Date: November 28, 2005
Analysis Date: December 1, 2005

Field QC

Field Blanks (FB): Not Provided
Equipment Blanks (EB): MY2906, MY2908, MY2912, MY2919, MY2921, and
MY2923
Background Samples (BG): Not Provided
Field Duplicates (D1): MY2910 and MY2911

Laboratory QC

Method Blanks & Associated Samples: Preparation Blank-Water (PBW) and
samples listed above
Matrix Spike: MY2905S
Duplicates: MY2905D
ICP Serial Dilution: MY2905L

Analysis: Select CLP Dissolved Metals and Dissolved Boron
by ICP-AES

<u>Analyte</u>	<u>Sample Preparation and Digestion Date</u>	<u>Analysis Date</u>
ICP-AES Metals	November 28, 2005	December 1, 2005

CLP PO Action

None.

Sampling Issues

1. The Traffic Report/Chain of Custody (TR/COC) record form did not specify a sample to be used for laboratory quality control (QC). As a result, the laboratory selected sample MY2905 for laboratory QC. The effect on data quality is not known.

Additional Comments

The samples in this SDG were analyzed for dissolved aluminum, calcium, iron, magnesium, potassium, sodium, and boron by ICP-AES under Modified Analysis Request (MAR), Modification Reference Number 1264.1.

The TR/COC record forms indicate samples were collected for dissolved metals. The filter pore size was not specified.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are listed in Table 1B.

This report was prepared in accordance with the following documents:

- X Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- X *Request for Quote for Modified Analysis* (SOW flexibility clause), Modification Reference Number: 1264.1, Title: AES070705.0, August 23, 2005;
- X *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration ILM05.3*, March 2004; and
- X *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	<u>Parameter</u>	<u>Acceptable</u>	<u>Comment</u>
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	Yes	
9.	ICP Serial Dilution Analysis	Yes	
10.	ICP-MS Internal Standards	N/A	
11.	Field Duplicate Sample Analysis	Yes	
12.	Sample Quantitation	Yes	A
13.	Overall Assessment	Yes	

N/A = Not Applicable

III. VALIDITY AND COMMENTS

- A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

- B. The following results are reported as non-detected (U) in Table 1A due to low level continuing calibration blank contamination.

X Aluminum in all samples

X Calcium and magnesium in sample MY2921

The values for aluminum in the continuing calibration blanks CCB2 (40.9 µg/L), CCB3 (51.7 µg/L), and CCB4 (84.8 µg/L) are greater than the MDL but less than the CRQL. The values for calcium and magnesium in the continuing calibration blanks CCB3 (42.2 µg/L and 66.7 µg/L, respectively) and CCB4 (28.9 µg/L and 65.0 µg/L, respectively) are greater than the respective MDLs but less than the respective CRQLs. Sample results greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

- U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
- UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

