



ICF Consulting / Laboratory Data Consultants

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MEMORANDUM

TO: Chris Lichens, Remedial Project Manager
Site Cleanup Section 4, SFD-7-4

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.: 00905072

DATE: February 22, 2006

SUBJECT: Review of Analytical Data, Tier 3

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

Site:	Omega Chem OU2 ACE
Site Account No.:	09 BC LA02
CERCLIS ID No.:	CAD042245001
Case No.:	None
SDG No.:	045674
Laboratory:	Applied Physics & Chemistry Laboratories (APCL)
Analysis:	Hexavalent Chromium
Samples:	6 Groundwater Samples (see Case Summary)
Collection Date:	December 7, 2004
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

SAMPLING ISSUES: [] Yes [X] No

Data Validation Report

Case No.: None
SDG No.: 045674
Site: Omega Chem OU2 ACE
Laboratory: Applied Physics & Chemistry Laboratory (APCL)
Reviewer: Stan Kott, ESAT/LDC
Date: February 22, 2006

I. CASE SUMMARY

Sample Information

Samples: OC2-MW1A-W-0-98, OC2-MW1B-W-0-99,
OC2-MW6-W-0-100, OC2-MW9B-W-0-101,
OC2-MW7A-W-0-102, and OC2-MW7A -W-1-103
Concentration and Matrix: Low Concentration Groundwater
Analysis: Hexavalent Chromium
SOW: EPA Method 218.6
Collection Date: December 7, 2004
Sample Receipt Date: December 7, 2004
Preparation Date: December 7, 2004
Analysis Date: December 7, 2004

Field QC

Field Blanks (FB): Not Provided
Equipment Blanks (EB): Not Provided
Background Samples (BG): Not Provided
Field Duplicates (D1): OC2-MW7A-W-0-102 and OC2-MW7A-W-1-103

Laboratory QC

Method Blank (MB): MB
Associated Samples: Samples listed above
Matrix Spike (MS): OC2-MW9B-W-0-101MS
Duplicates (D): Laboratory Control Sample (LCS) and
LCS Duplicate (LCSD)

Analysis: Hexavalent Chromium

<u>Analyte</u>	<u>Sample Preparation Date</u>	<u>Analysis Date</u>
Hexavalent Chromium	December 7, 2004	December 7, 2004

Sampling Issues

None.

Additional Comments

The analytical method does not require analysis of a practical quantitation limit (PQL) standard to confirm linearity of the calibration curve at the 1 µg/L PQL. Since the laboratory analyzed a 0.2 µg/L standard that is near the PQL as part of the instrument calibration, this is not expected to have a significantly adverse effect on data quality for hexavalent chromium in OC2MW9B-W-0-101, OC2MW7A-W-0-102, and OC2MW7A-W-1-103.

Standards preparation data were not included in the data package and could not be reviewed. No adverse effect on data quality is expected.

Analytical results are listed in Table 1A. Definitions of data qualifiers 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*; and
- X *USEPA Method 218.6, Determination of Dissolved Hexavalent Chromium in Drinking Water, Groundwater, and Industrial Wastewater Effluents by Ion Chromatography*, Revision 3.2, April 1991.

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		
4.	Blanks	Yes	
5.	Laboratory Control Sample (LCS)	Yes	
6.	Duplicate Sample Analysis	Yes	
7.	Matrix Spike Sample Analysis	Yes	
8.	Field Duplicate Sample Analysis	Yes	
9.	Sample Quantitation	Yes	
10.	Overall Assessment	Yes	

N/A = Not Applicable

III. OVERALL ASSESSMENT OF DATA

All of the method requirements specified in EPA Method 218.6 have been met. Reported results for hexavalent chromium in all of the samples of this SDG were correctly calculated.

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.

