



**ICF International / Laboratory Data Consultants**

Environmental Services Assistance Team, Region 9  
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MEMORANDUM

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

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)  
Quality Assurance (QA) Program, MTS-3

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

ESAT Contract No.: EP-W-06-041  
Technical Direction Form No.: 00105041 Amendment 4

DATE: March 19, 2007

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
Site Account No.:	09 BC LA02
CERCLIS ID No.:	CAD042245001
Case No.:	Not Provided
SDG No.:	IPH3268
Laboratory:	Test America Analytical Testing Corp.
Analysis:	1,2,3-Trichloropropane (1,2,3-TCP) and n-Nitrosodimethylamine (NDMA)
Samples:	5 Water Samples (see Case Summary)
Collection Date:	August 31, 2006
Reviewer:	Nanny Estrada, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM 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  No



## Data Validation Report – Tier 3

Case No.: Not Provided  
SDG No.: IPH3268  
Site: Omega Chem OU2  
Laboratory: Test America Analytical Testing Corp.  
Reviewer: Nanny Estrada, ESAT/LDC  
Date: March 19, 2007

### I. CASE SUMMARY

#### Sample Information

Samples: OC2-MW16C-W-0-228, OC2-MW16B-W-0-229,  
OC2-MW16A-W-0-230, OC2-MW22-W-0-231, and  
OC2-MW21-W-0-232  
Concentration and Matrix: Low Concentration Water  
Analysis: 1,2,3-TCP (GC/MS) and NDMA (GC/MS/MS CI)  
SOW: EPA Methods 524.2 and 1625 Modified  
Collection Date: August 31, 2006  
Sample Receipt Date: August 31, 2006  
Extraction Date: September 7, 2006  
Analysis Date: September 7 and 13, 2006

#### Field QC

Field Blanks (FB): Not Provided  
Trip Blanks (TB): Not Provided  
Equipment Blanks (EB): Not Provided  
Background Samples (BG): Not Provided  
Field Duplicates (D1): Not Provided

#### Laboratory QC

Method Blanks & Associated Samples:  
6I07058-BLK1: (NDMA) All samples  
C6I0702-BLK1: (1,2,3-TCP) All samples

#### Tables

1B: Data Qualifier Definitions for Organic Data Review

#### Sampling Issues

None.

#### Additional Comments

For the NDMA analysis, decafluorotriphenylphosphine (DFTPP) was not analyzed. Since NDMA is analyzed by the chemical ionization (CI) technique, no adverse effect is expected.

This report was prepared in accordance with the following documents:

- X ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Volatile and Semivolatile Data Packages*;
- X EPA Method 524.2, *Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry*, Revision 4.1, 1995;
- X EPA Method 1625C, *Semivolatile Organic Compounds by Isotope dilution GC/MS*, June 1989; and
- X *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, October 1999.

## II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	<u>Parameter</u>	<u>Acceptable</u>	<u>Comment</u>
1.	Holding Time/Preservation	Yes	
2.	GC/MS and GC Performance	Yes	
3.	Initial Calibration	Yes	
4.	Continuing Calibration	Yes	
5.	Laboratory Blanks	Yes	
6.	Field Blanks	N/A	
7.	Surrogate (Method 524.2)	Yes	
8.	Labeled Compound (Method 1625)	No	B
9.	Matrix Spike/Matrix Spike Duplicates	N/A	
10.	Laboratory Control Samples/Duplicates	Yes	
11.	Internal Standard	Yes	
12.	Compound Identification	Yes	
13.	Compound Quantitation	No	A
14.	System Performance	Yes	
15.	Field Duplicate Sample Analysis	N/A	

N/A = Not Applicable

## III. VALIDITY AND COMMENTS

- A. The laboratory reported the NDMA sample practical quantitation limit (PQL) as 0.0019 ug/L. No NDMA was detected above this PQL. However, the area for the low standard of the initial calibration is only 843 (see attached quantitation report, p. 28 in data package). In the reviewer's professional judgment, the sample PQL should be raised to 0.01 ug/L; non-detected sample results should be reported as 0.01U.
- B. The laboratory did not spike the samples and method blanks with a labeled compound (i.e., surrogate; see Method 1625C Sections 6.8, 10.2.1.3, and 10.2.3.2 and Figure 4). Consequently, the extraction efficiency (surrogate recovery) cannot be evaluated. The NDMA-d6 spiked by the laboratory was used as an internal standard.

## TABLE 1B

### DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October 1999.

- U The analyte was analyzed for but was not detected above the reported sample quantitation limit.
- L Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.