

**Fort Ord OU CT Bio Pilot Study  
Data Validation Reports  
LDC# 11183**

Bromide

*LDC*

**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Fort Ord OU CT Bio Pilot Study  
**Collection Date:** October 31, 2003  
**LDC Report Date:** December 2, 2003  
**Matrix:** Water  
**Parameters:** Bromide  
**Validation Level:** EPA Level III  
**Laboratory:** Sequoia Analytical

**Sample Delivery Group (SDG):** P311018

**Sample Identification**

0344MOCT252F  
0344MOCT259F  
0344MOCT263F  
0344MOCT270F  
0344MOCT271F  
0344MOCT271FMS  
0344MOCT271FMSD

## Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Bromide.

The review follows a the USACE Environmental Data Quality Management Program Specifications, USACE Sacramento District (Version 1.08) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- J+ Data are qualified as estimated, with a high bias likely to occur. False positives or false negatives are unlikely to have been reported.
- J- Data are qualified as estimated, with a low bias likely to occur. False positives or false negatives are unlikely to have been reported.
- J Data are qualified as estimated; it is not possible to assess the direction of the potential bias. False positives or false negatives are unlikely to have been reported.
- R Data are qualified as rejected. There is a significant potential for the reporting of false negatives or false positives.
- U Data are qualified as non-detected, because the analyte was observed in an associated laboratory or field blank.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## **I. Technical Holding Times**

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## **II. Calibration**

### **a. Initial Calibration**

All criteria for the initial calibration of each method were met.

### **b. Calibration Verification**

Calibration verification frequency and analysis criteria were met for each method.

## **III. Blanks**

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

## **IV. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## **V. Duplicates**

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

## **VI. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## **VII. Sample Result Verification**

Raw data were not reviewed for this SDG.

## **VIII. Overall Assessment of Data**

Data flags are summarized at the end of this report.

### **IX. Field Duplicates**

No field duplicates were identified in this SDG.

### **X. Field Blanks**

No field blanks were identified in this SDG.

**Fort Ord OU CT Bio Pilot Study  
Bromide - Data Qualification Summary - SDG P311018**

No Sample Data Qualified in this SDG

**Fort Ord OU CT Bio Pilot Study  
Bromide - Laboratory Blank Data Qualification Summary - SDG P311018**

No Sample Data Qualified in this SDG

LDC #: 11183B6  
 SDG #: P311018  
 Laboratory: Sequoia Analytical

**VALIDATION COMPLETENESS WORKSHEET**  
 Level III

Date: 11/30/03  
 Page: 1 of 1  
 Reviewer: km  
 2nd Reviewer: A

**METHOD:** Bromide (EPA Method 300.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

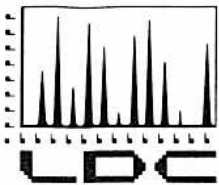
	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: <u>10/31/03</u>
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IVa.	Matrix Spike/(Matrix Spike) Duplicates	A	
IVb.	Laboratory control samples	A	<u>LC</u>
V.	Sample result verification	N	
VI.	Overall assessment of data	A	
VII.	Field duplicates	N	
VIII.	Field blanks	N	

Note: A = Acceptable  
 N = Not provided/applicable  
 SW = See worksheet  
 ND = No compounds detected  
 R = Rinsate  
 FB = Field blank  
 D = Duplicate  
 TB = Trip blank  
 EB = Equipment blank

Validated Samples: MA

1	0344MOCT252F	11		21		31	
2	0344MOCT259F	12		22		32	
3	0344MOCT263F	13		23		33	
4	0344MOCT270F	14		24		34	
5	0344MOCT271F	15		25		35	
6	0344MOCT271FMS	16		26		36	
7	0344MOCT271FMSD	17		27		37	
8	<u>MB</u>	18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_  
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**LABORATORY DATA CONSULTANTS, INC.**

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MACTEC  
5341 Old Redwood Highway, Suite 300  
Petaluma, CA 94954  
ATTN: Ms. Debbie Leibensberger

March 24, 2004

SUBJECT: Fort Ord OUC Bio Pilot Study, Data Validation

Dear Ms. Leibensberger

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on March 19, 2004. Attachment 1 is a summary of the samples that were reviewed for each analysis.

**LDC Project # 11696:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
170384, 169446	Volatiles

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USACE Environmental Data Quality Management Program Specifications, USACE District, Version 1.08
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999

Please feel free to contact us if you have any questions.

Sincerely,

Stacey A. Swenson  
Operations Manager/Senior Chemist



