Department of Energy

Pittsburgh Naval Reactors Office
Idaho Branch Office
P.O. Box 2469
Idaho Falls, Idaho 83403-2469

Daryl Koch
Acting Remediation Manager
Department of Environmental Quality
Waste Management and Remediation Division
1410 North Hilton
Boise, Idaho 83706

NR:IBO-04/055
April 5, 2004

Nicholas Ceto,
INEEL Project Manager
EPA Region 10
712 Swift Blvd., Suite 5
Richland, WA 99352

Subject: SUBMITTAL OF VALIDATED SOIL GAS SAMPLE DATA FOR THE FOURTH QUARTER 2003

This letter forwards the validated NRF soil gas sample data for the fourth quarter of 2003 collected in support of the NRF Landfill Remedial Action Operations and Maintenance Plan. The data is being submitted within the time frame as specified in the INEEL Federal Facility Agreement/Consent Order (FFA/CO).

A review of the data indicates that overall soil gas volatile organic data are consistent with past results, with the exceptions noted below. Toluene and total xylenes, which have not been consistently detected, may be associated with gasoline emissions from a nearby vehicle as discussed in previous data submittal reviews.

This sample data set includes samples collected from the newly reconstructed soil gas monitoring probes, MW1-1 and MW1-2 (located on the north end of Site 8-05-1), that were completed in November 2003. This is the first set of reliable samples that have been obtained at these locations. Freon-11 and chloroform detected at MW1-1 were detected at low levels (but within the same range as detected at MW1-3 and MW1-4). Trichloroethene was detected at MW1-1 at a higher level than detected at MW1-3 or MW1-4. MW1-2 detected toluene, total xylenes, PCE, and Freon-11 at low levels (but within the same range as detected at other locations).

All of the soil data were deemed acceptable and usable by the data validation process.

If you have any questions and/or comments regarding this information, please contact me at (208)533-5294.

W. R. Dixon
Naval Reactors Idaho Branch Office

Enclosures:
As stated

cc: K. Ivy, EPA
R. M. Stallman, NE-ID

bcc: J. M. McKenzie, NR-08U (w/o enclosures)
M. G. Hardin, NR-08ECF (w/o enclosures)
T. J. Mueller, NR-08R (w/o enclosures)
W. J. Reynolds, NRF-RadCon (w/o enclosures)

Enclosure to NR:IBO-04/055

Validated Soil Gas Sample Data for the Fourth Quarter 2003

DATA VALIDATION REPORT

Project/Site Name:	Naval Reactor Facility Landfill Soil Gas Monitoring
Report Date:	January 29, 2004
TLI Release # / Lab Batch ID:	2119240-134/ E3L100341
Laboratory:	Severn Trent Services-Los Angeles
Method:	SG-01 - Method TO-14 - Volatile Organic Compounds
No. Samples/Sampling Matrix:	17/Soil Gas
Sample Numbers:	03-SG-1834, 03-SG-1835, 03-SG-1836, 03-SG-1837, 03-SG-1838, 03-SG-1839, 03-SG-1840, 03-SG-1841, 03-SG-1842, 03-SG-1843, 03-SG-1844, 03-SG-1845, 03-SG-1846, 03-SG-1847, 03-SG-1848, 03-SG-1849, 03-SG-1850

Data validation was conducted in accordance with the validation protocols listed in SOP-DV-05 August 2, 2002.

The data were evaluated based on the following parameters:

- Contract Compliance
- Chain-of-Custody
- Holding Times
- Blank Analysis
- GC/ MS BFB Tuning
- Calibrations
- Laboratory Control Sample Analysis
- Internal Standard Performance
- Duplicate Sample Analysis
- Data Completeness
- Data Usability

The following Data Flag Table and Data Assessment Summary have been reviewed for accuracy and technical merit.

Ken Schroeder
Quality Assurance Officer

1/29/04
Date

DATA ASSESSMENT SUMMARY

Contract Compliance

Volatile organic compounds were analyzed by method TO-14. The list of analytes reported by the laboratory included more compounds then specified by the analyte list for SG-01. The analytes reported on the Table 1 of the data validation report include only the compounds listed for the analyte list associated with SG-01 and all other compounds that were detected in one or more of the samples. All additional analytes reported by the laboratory not included on the soil gas list for SG-01 were not included on Table 1. All of these unreported analytes were not detected during analysis.

Chain-of-Custody

All information required on the chain-of-custody record was present.

Holding Times

All samples were analyzed within 14 days of collection. The data validation guidelines indicate that the holding time for all compounds is 14 days. Therefore, no action is required due to holding times.

Blank Analysis

The method blanks were analyzed at the correct frequency. The method blanks were not contaminated with target analytes.

The field blank (sample 03-SG-1844) was not contaminated with target analytes.

The equipment blank sample 03-SG-1850 was contaminated with tetrachloroethene at 3.2 ppb. The following detected sample results were qualified as non-detected (U) because the sample results were less than five times the blank value:

> Tetrachloroethene in samples 03-SG-1834, 03-SG-1837, 03-SG-1838, 03-SG-1839, 03-SG-1840, 03-SG-1841, 03-SG-1842, 03-SG-1843, 03-SG-1845, and 03-SG-1846

GC/MS BFB Tuning

All GC/MS BFB tune criteria were met for the analytical sequences associated with the sample analyses.

Calibration

All initial and continuing calibration RRF values were greater than 0.05.

All initial calibration percent relative standard deviations (%RSDs) were within the 30% acceptance criteria. No calculation errors were found.

All continuing calibration percent differences (%Ds) were within the 30% acceptance criteria for the target compounds. No calculation errors were found.

Laboratory Control Sample Analysis

The recoveries for the five required spiking compounds were within acceptable recovery limits of 70-130%. Raw data and summary forms were evaluated. No calculation errors were found.

Internal Standards Performance

All internal standard area counts and response times were within the established acceptance criteria. Summary forms and raw data were evaluated.

Duplicate Sample Analysis

A sample duplicate was not analyzed. The laboratory control sample was analyzed in duplicate and all precision criteria were met.

All field duplicate criteria were met for the field duplicate samples 03-SG-1847 / 03-SG-1849.

Data Completeness

The detected results for tetrachloroethene in ten samples were qualified as non-detected (U) because of contamination with the equipment blank. However, results qualified for blank contamination do not affect data completeness. Therefore the data were 100% complete for this sampling event.

Data Usability

The data were 100% usable.

Bill Fen

Validator

1-29-04

Date

Table 1. Organic Data Flag Table and Data Assessment Summary

Sample Information
Validation Date: January 29, 2004
Blanket Order and Release #: 2119240-134
Laboratory Supplying Data: Severn Trent Services
Sample Location: NRF
Sample Type: SG-01

Data Package Integrity
Contractual Compliance: See Data Validation Report
Chain-of-Custody: See Data Validation Report
Data Completeness:100%
Data Usability:100%

Data Flag Key	
A = Acceptable	O = Omitted
J = Estimate	
U = Below Instrument Detection Limit (IDL)	
UJ = Estimated IDL	
R = Unusable	NA = Not Applicable

	VOC Parameter																				
Validation Criteria	Benzene	Carbon tetrachloride	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Dichloromethane (Methylene Chloride)	Ethylbenzene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes (total)	Chloroform	Dichlorodifluoromethane		
Holding Times																					
Lab Blanks																					
Field /Equip Blanks											U										
Calibration																					
LCS																					
Internal Standards																					
Lab Duplicates	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Field Duplicates																					
MS/MSD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

	VOC Parameter																			
Validation Criteria		Acetone	2-Butanone	1,4-Dichlorobenzene																
Holding Times																				
Lab Blanks																				
Field /Equip Blanks																				
Calibration																				
LCS																				
Internal Standards																				
Lab Duplicates		NA	NA	NA																
Field Duplicates																				
MS/MSD		NA	NA	NA																

Summary Validation Flag Table Units (ppb v/v)

Sample Number	Method	Benzene	Carbon tetrachloride	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Dichloromethane (Methylene Chloride)	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane
03-SG-1834	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.4 U	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1835	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	19	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1836	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1837	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.6 U	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1838	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.0 U	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1839	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.7 U	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1840	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	12 U	2.0 U	2.0 U	2.0 U	3.8
03-SG-1841	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	14 U	2.0 U	2.5	2.0 U	5.0
03-SG-1842	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	9.6 U	2.0 U	2.0 U	2.0 U	2.2
03-SG-1843	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	15 U	2.0 U	5.0	94	4.8
03-SG-1844	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
03-SG-1845	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.2 U	2.0 U	2.0 U	240	2.5
03-SG-1846	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.1 U	6.2	2.0 U	2.0 U	3.4
03-SG-1847	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	350	2.0 U	2.0 U	23	2.5
03-SG-1848	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	330	2.0 U	2.0 U	5.5	2.0
03-SG-1849	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	330	2.0 U	2.0 U	22	2.9
03-SG-1850	TO-14	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.2	2.0 U	2.0 U	2.0 U	2.0 U

		Summary Validation Flag Table Units (ppb v/v)																							
Sample Number	Method	Vinyl Chloride		Xylenes (total)		Acetone		2-Butanone		Dichlorodifluoromethane		Chloroform		1,4-Dichlorobenzene											
03-SG-1834	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1835	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1836	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1837	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1838	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1839	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1840	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1841	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1842	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1843	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1844	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1845	TO-14	2.0	U	2.4		10	U	10	U	2.0	U	6.2		2.0	U										
03-SG-1846	TO-14	2.0	U	3.3		10	U	10	U	2.0	U	2.0	U	2.0	U										
03-SG-1847	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0		2.0	U										
03-SG-1848	TO-14	2.0	U	2.0	U	10	U	10	U	18		2.0	U	2.0	U										
03-SG-1849	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.1		2.0	U										
03-SG-1850	TO-14	2.0	U	2.0	U	10	U	10	U	2.0	U	2.0	U	2.0	U										

SEVERN TRENT STL

December 23, 2003

STL LOT NUMBER: **E3L100341**

Paula Kain
BECHTEL BETTIS, INC.
Naval Reactors Facility
Idaho Falls, ID 83415

Dear Ms. Kain,

This report contains the analytical results for the 17 samples received under chain of custody by STL Los Angeles on December 10, 2003. These samples are associated with your NRF LF SOIL GAS MONITORING project.

Preliminary results were sent via facsimile on Thursday, December 18, 2003.

STL Los Angeles certifies that the test results provided in this report meet all the requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number is 01118CA / E87652.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000323 pages.

SEVERN TRENT STL

CASE NARRATIVE

All applicable quality control procedures met method-specified acceptance criteria. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. Any matrix related anomalies are footnoted within the report.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Jesse Bacwaden
Project Manager

CC: Project File

E3L100341

To be Completed by Sampler (except for "Lab #" section)

NRF ENVIRONMENTAL MONITORING PROGRAM
NAVAL REACTORS FACILITY
BECHTEL BETTIS, INC.
UPS address:
IDAHO FALLS, IDAHO 83415
U.S. mail address:
P.O. BOX 2068
IDAHO FALLS, IDAHO 83403-2068

NRF CONTACT: P. S. Kain
TELEPHONE #: 208-533-5640
PROJECT NAME: NRF Landfill soil gas monitoring
JOB/PO#: 3000955 BLANKET ORDER RELEASE #:

LAB #	NRF SAMPLE #			DATE	TIME	LOCATION	TEST PARAMETERS: TO-14											Number of Containers	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
	03	SG	1834	12/5/03	0935	MW53-1	X											1	
	03	SG	1835	12/5/03	0942	MW53-2	X											1	
	03	SG	1836	12/5/03	0947	MW53-3	X											1	
	03	SG	1837	12/5/03	0954	MW53-4	X											1	
	03	SG	1838	12/5/03	1003	MW53-5	X											1	
	03	SG	1839	12/5/03	1008	MW53-6	X											1	
	03	SG	1840	12/5/03	1028	MW51-1	X											1	
	03	SG	1841	12/5/03	1035	MW51-2	X											1	
	03	SG	1842	12/5/03	1042	MW51-3	X											1	
	03	SG	1843	12/5/03	1049	MW51-4	X											1	
	03	SG	1844	12/5/03	1052	MW51-5	X											1	
	03	SG	1845	12/5/03	1336	MW1-1	X											1	
	03	SG	1846	12/5/03	1342	MW1-2	X											1	
	03	SG	1847	12/5/03	1352	MW1-3	X											1	
	03	SG	1848	12/5/03	1403	MW1-4	X											1	
	03	SG	1849	12/5/03	1354	MW1-5	X											1	
	03	SG	1850	12/5/03	1406	MW1-6	X											1	

To Be Completed by Sampler & Shipper

Relinquished by Sampler (printed name)	Date	Received by (printed nname)	Date
B. J. Woodbury	12-8-03	G W TONKS	12/8/03
Signature: B J Woodbury	Time: 1400	Signature: G W Tonks	Time: 1400
Company: Bechtel Bettis, Inc.		Company: BBI	

SHIPPING INFORMATION — Total Number of Containers: 17

Laboratory: STL
Attention: Jesse Bacwanden
Address: 1721 South Grand Ave
City/State: Santa Ana, CA
ZIP: 92705
Phone: 714-258-8610 ext. 323

Shipment Method:

To Be Completed by Receiving Lab

Relinquished by Sampler (printed name)	Date	Received by (printed nname)	Date
G W TONKS	12/9/03	Federal Express	
Signature: G W Tonks	Time: 1400	Signature	Time
Company: BBI		Company	

	Yes	No	
1.	☐	☐	Sample container arrived intact.
2.	☐	☐	Sample seals intact.
3.	☐	☐	Sample chain of custody complete

Lab Representative (signature) (Printed name)

Explanation or Remarks:

FED EX 12-10-03 1015 STL K FREITAG 12-10-03 1015

SEVERN TRENT STL

Analytical Report

ANALYTICAL REPORT

PROJECT NO. 3000955

NRF LF SOIL GAS MONITORING

Lot #: E3L100341

Paula Kain

BECHTEL BETTIS, INC.

SEVERN TRENT LABORATORIES, INC.

Jesse Bacwaden
Project Manager

December 18, 2003

EXECUTIVE SUMMARY - Detection Highlights

E3L100341

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
03-SG-1834 12/05/03 09:35 001				
Tetrachloroethene	4.4	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1835 12/05/03 09:42 002				
Tetrachloroethene	19	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1837 12/05/03 09:54 004				
Tetrachloroethene	3.6	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1838 12/05/03 10:03 005				
Tetrachloroethene	3.0	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1839 12/05/03 10:08 006				
Tetrachloroethene	5.7	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1840 12/05/03 10:28 007				
Trichlorofluoromethane	3.8	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	12	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1841 12/05/03 10:35 008				
Trichlorofluoromethane	5.0	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	2.5	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	14	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1842 12/05/03 10:42 009				
Trichlorofluoromethane	2.2	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	9.6	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1843 12/05/03 10:49 010				
Trichlorofluoromethane	4.8	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	5.0	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	94	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	15	2.0	ppb(v/v)	EPA-21 TO-14A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E3L100341

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
03-SG-1845 12/05/03 13:36 012				
Trichlorofluoromethane	2.5	2.0	ppb(v/v)	EPA-21 TO-14A
Chloroform	6.2	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	240	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	2.2	2.0	ppb(v/v)	EPA-21 TO-14A
Xylenes (total)	2.4	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1846 12/05/03 13:42 013				
Trichlorofluoromethane	3.4	2.0	ppb(v/v)	EPA-21 TO-14A
Toluene	6.2	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	3.1	2.0	ppb(v/v)	EPA-21 TO-14A
Xylenes (total)	3.3	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1847 12/05/03 13:52 014				
Trichlorofluoromethane	2.5	2.0	ppb(v/v)	EPA-21 TO-14A
Chloroform	2.0	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	23	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	350	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1848 12/05/03 14:03 015				
Dichlorodifluoromethane	18	2.0	ppb(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	2.0	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	5.5	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	330	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1849 12/05/03 13:54 016				
Trichlorofluoromethane	2.9	2.0	ppb(v/v)	EPA-21 TO-14A
Chloroform	2.1	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	22	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	330	2.0	ppb(v/v)	EPA-21 TO-14A
03-SG-1850 12/05/03 14:06 017				
Tetrachloroethene	3.2	2.0	ppb(v/v)	EPA-21 TO-14A

ANALYTICAL METHODS SUMMARY

E3L100341

PARAMETER	ANALYTICAL METHOD
Volatile Organics by TO-14A	EPA-21 TO-14A

References:

EPA-21 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", Second Edition, EPA/625/R-96/010b, January 1999

SAMPLE SUMMARY

E3L100341

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F6EDV	001	03-SG-1834	12/05/03	09:35
F6ED0	002	03-SG-1835	12/05/03	09:42
F6ED1	003	03-SG-1836	12/05/03	09:47
F6ED2	004	03-SG-1837	12/05/03	09:54
F6ED4	005	03-SG-1838	12/05/03	10:03
F6ED6	006	03-SG-1839	12/05/03	10:08
F6ED7	007	03-SG-1840	12/05/03	10:28
F6EEA	008	03-SG-1841	12/05/03	10:35
F6EEC	009	03-SG-1842	12/05/03	10:42
F6EEE	010	03-SG-1843	12/05/03	10:49
F6EEH	011	03-SG-1844	12/05/03	10:52
F6EEK	012	03-SG-1845	12/05/03	13:36
F6EEL	013	03-SG-1846	12/05/03	13:42
F6EEQ	014	03-SG-1847	12/05/03	13:52
F6EER	015	03-SG-1848	12/05/03	14:03
F6EET	016	03-SG-1849	12/05/03	13:54
F6EEV	017	03-SG-1850	12/05/03	14:06

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1834

GC/MS Volatiles

Lot-Sample #...: E3L100341-001 **Work Order #...:** F6EDV1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**4.4**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1834

GC/MS Volatiles

Lot-Sample #...: E3L100341-001 Work Order #...: F6EDV1AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1835

GC/MS Volatiles

Lot-Sample #...: E3L100341-002 **Work Order #...:** F6ED01AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**19**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1835

GC/MS Volatiles

Lot-Sample #...: E3L100341-002 **Work Order #...:** F6ED01AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1836

GC/MS Volatiles

Lot-Sample #...: E3L100341-003 **Work Order #...:** F6ED11AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	ND	2.0	ppb(v/v)
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1836

GC/MS Volatiles

Lot-Sample #...: E3L100341-003 **Work Order #...:** F6ED11AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1837

GC/MS Volatiles

Lot-Sample #...: E3L100341-004 **Work Order #...:** F6ED21AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**3.6**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1837

GC/MS Volatiles

Lot-Sample #...: E3L100341-004 **Work Order #...:** F6ED21AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1838

GC/MS Volatiles

Lot-Sample #...: E3L100341-005 **Work Order #...:** F6ED41AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**3.0**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1838

GC/MS Volatiles

Lot-Sample #...: E3L100341-005 Work Order #...: F6ED41AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1839

GC/MS Volatiles

Lot-Sample #...: E3L100341-006 **Work Order #...:** F6ED61AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**5.7**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1839

GC/MS Volatiles

Lot-Sample #...: E3L100341-006 **Work Order #...:** F6ED61AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1840

GC/MS Volatiles

Lot-Sample #...: E3L100341-007 **Work Order #...:** F6ED71AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**3.8**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**12**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1840

GC/MS Volatiles

Lot-Sample #...: E3L100341-007 **Work Order #...:** F6ED71AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1841

GC/MS Volatiles

Lot-Sample #...: E3L100341-008 **Work Order #...:** F6EEA1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**5.0**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	**2.5**	**2.0**	**ppb(v/v)**
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**14**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1841

GC/MS Volatiles

Lot-Sample #...: E3L100341-008 **Work Order #...:** F6EEA1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1842

GC/MS Volatiles

Lot-Sample #...: E3L100341-009 Work Order #...: F6EEC1AA Matrix.....: AIR
Date Sampled...: 12/05/03 Date Received..: 12/10/03
Prep Date.....: 12/15/03 Analysis Date..: 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 Instrument ID..: MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**2.2**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**9.6**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1842

GC/MS Volatiles

Lot-Sample #...: E3L100341-009 **Work Order #...:** F6EEC1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1843

GC/MS Volatiles

Lot-Sample #...: E3L100341-010 **Work Order #...:** F6EEE1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**4.8**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	**5.0**	**2.0**	**ppb(v/v)**
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	**94**	**2.0**	**ppb(v/v)**
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**15**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1843

GC/MS Volatiles

Lot-Sample #...: E3L100341-010 **Work Order #...:** F6EEE1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1844

GC/MS Volatiles

Lot-Sample #...: E3L100341-011 **Work Order #...:** F6EEH1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	ND	2.0	ppb(v/v)
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1844

GC/MS Volatiles

Lot-Sample #...: E3L100341-011 **Work Order #...:** F6EEH1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1845

GC/MS Volatiles

Lot-Sample #...: E3L100341-012 **Work Order #...:** F6EEK1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**2.5**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	**6.2**	**2.0**	**ppb(v/v)**
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	**240**	**2.0**	**ppb(v/v)**
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**2.2**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1845

GC/MS Volatiles

Lot-Sample #...: E3L100341-012 **Work Order #...:** F6EEK1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	**2.4**	**2.0**	**ppb(v/v)**
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1846

GC/MS Volatiles

Lot-Sample #...: E3L100341-013 **Work Order #...:** F6EEL1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/15/03 **Analysis Date..:** 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**3.4**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	**6.2**	**2.0**	**ppb(v/v)**
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**3.1**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1846

GC/MS Volatiles

Lot-Sample #...: E3L100341-013 **Work Order #...:** F6EEL1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	**3.3**	**2.0**	**ppb(v/v)**
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1847

GC/MS Volatiles

Lot-Sample #...: E3L100341-014 **Work Order #...:** F6EEQ1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/16/03 **Analysis Date..:** 12/16/03
Prep Batch #...: 3351290
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MS3
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**2.5**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	**2.0**	**2.0**	**ppb(v/v)**
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	**23**	**2.0**	**ppb(v/v)**
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**350**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1847

GC/MS Volatiles

Lot-Sample #...: E3L100341-014 **Work Order #...:** F6EEQ1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1848

GC/MS Volatiles

Lot-Sample #...:	E3L100341-015	**Work Order #...:**	F6EER1AA	**Matrix.....:**	AIR
Date Sampled...:	12/05/03	**Date Received..:**	12/10/03		
Prep Date.....:	12/16/03	**Analysis Date..:**	12/16/03		
Prep Batch #...:	3351290				
Dilution Factor:	1				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	**18**	**2.0**	**ppb(v/v)**
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**2.0**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	**5.5**	**2.0**	**ppb(v/v)**
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**330**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1848

GC/MS Volatiles

Lot-Sample #...: E3L100341-015 **Work Order #...:** F6EER1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1849

GC/MS Volatiles

Lot-Sample #...: E3L100341-016 **Work Order #...:** F6EET1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/16/03 **Analysis Date..:** 12/16/03
Prep Batch #...: 3351290
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	**2.9**	**2.0**	**ppb(v/v)**
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	**2.1**	**2.0**	**ppb(v/v)**
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	**22**	**2.0**	**ppb(v/v)**
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**330**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1849

GC/MS Volatiles

Lot-Sample #...: E3L100341-016 **Work Order #...:** F6EET1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

BECHTEL BETTIS INC

Client Sample ID: 03-SG-1850

GC/MS Volatiles

Lot-Sample #...: E3L100341-017 **Work Order #...:** F6EEV1AA **Matrix.....:** AIR
Date Sampled...: 12/05/03 **Date Received..:** 12/10/03
Prep Date.....: 12/16/03 **Analysis Date..:** 12/16/03
Prep Batch #...: 3351290
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	2.0	ppb(v/v)
Chloromethane	ND	4.0	ppb(v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)
Vinyl chloride	ND	2.0	ppb(v/v)
Bromomethane	ND	2.0	ppb(v/v)
Chloroethane	ND	4.0	ppb(v/v)
Trichlorofluoromethane	ND	2.0	ppb(v/v)
1,1-Dichloroethene	ND	2.0	ppb(v/v)
Carbon disulfide	ND	10	ppb(v/v)
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)
Acetone	ND	10	ppb(v/v)
Methylene chloride	ND	2.0	ppb(v/v)
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)
1,1-Dichloroethane	ND	2.0	ppb(v/v)
Vinyl acetate	ND	10	ppb(v/v)
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)
2-Butanone (MEK)	ND	10	ppb(v/v)
Chloroform	ND	2.0	ppb(v/v)
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)
Carbon tetrachloride	ND	2.0	ppb(v/v)
Benzene	ND	2.0	ppb(v/v)
1,2-Dichloroethane	ND	2.0	ppb(v/v)
Trichloroethene	ND	2.0	ppb(v/v)
1,2-Dichloropropane	ND	2.0	ppb(v/v)
Bromodichloromethane	ND	2.0	ppb(v/v)
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)
Toluene	ND	2.0	ppb(v/v)
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)
Tetrachloroethene	**3.2**	**2.0**	**ppb(v/v)**
2-Hexanone	ND	30	ppb(v/v)
Dibromochloromethane	ND	2.0	ppb(v/v)
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)

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BECHTEL BETTIS INC

Client Sample ID: 03-SG-1850

GC/MS Volatiles

Lot-Sample #...: E3L100341-017 **Work Order #...:** F6EEV1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chlorobenzene	ND	2.0	ppb(v/v)
Ethylbenzene	ND	2.0	ppb(v/v)
Xylenes (total)	ND	2.0	ppb(v/v)
Styrene	ND	2.0	ppb(v/v)
Bromoform	ND	2.0	ppb(v/v)
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)
Benzyl chloride	ND	10	ppb(v/v)
4-Ethyltoluene	ND	2.0	ppb(v/v)
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)
Hexachlorobutadiene	ND	4.0	ppb(v/v)

SEVERN TRENT STL

QA/QC

QC DATA ASSOCIATION SUMMARY

E3L100341

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		3350384	
002	AIR	EPA-21 TO-14A		3350384	
003	AIR	EPA-21 TO-14A		3350384	
004	AIR	EPA-21 TO-14A		3350384	
005	AIR	EPA-21 TO-14A		3350384	
006	AIR	EPA-21 TO-14A		3350384	
007	AIR	EPA-21 TO-14A		3350384	
008	AIR	EPA-21 TO-14A		3350384	
009	AIR	EPA-21 TO-14A		3350384	
010	AIR	EPA-21 TO-14A		3350384	
011	AIR	EPA-21 TO-14A		3350384	
012	AIR	EPA-21 TO-14A		3350384	
013	AIR	EPA-21 TO-14A		3350384	
014	AIR	EPA-21 TO-14A		3351290	
015	AIR	EPA-21 TO-14A		3351290	
016	AIR	EPA-21 TO-14A		3351290	
017	AIR	EPA-21 TO-14A		3351290	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 **Work Order #...:** F6RWA1AA **Matrix.....:** AIR
MB Lot-Sample #: M3L160000-384

Prep Date.....: 12/15/03 **Instrument ID..:** MSB
Analysis Date..: 12/15/03 **Prep Batch #...:** 3350384
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Chloromethane	ND	4.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Bromomethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Chloroethane	ND	4.0	ppb(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	10	ppb(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Acetone	ND	10	ppb(v/v)	EPA-21 TO-14A
Methylene chloride	ND	2.0	ppb(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	10	ppb(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	10	ppb(v/v)	EPA-21 TO-14A
Chloroform	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Benzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)	EPA-21 TO-14A
Toluene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
2-Hexanone	ND	30	ppb(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	2.0	ppb(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 **Work Order #...:** F6RWA1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Styrene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Bromoform	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	10	ppb(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	4.0	ppb(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3L100341
MB Lot-Sample #: M3L170000-290

Work Order #...: F6VVC1AA

Matrix.....: AIR

Prep Date.....: 12/16/03

Instrument ID..: MSB

Analysis Date..: 12/16/03
Prep Batch #...: 3351290
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Chloromethane	ND	4.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Bromomethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Chloroethane	ND	4.0	ppb(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	10	ppb(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Acetone	ND	10	ppb(v/v)	EPA-21 TO-14A
Methylene chloride	ND	2.0	ppb(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	10	ppb(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	10	ppb(v/v)	EPA-21 TO-14A
Chloroform	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Benzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Trichloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	10	ppb(v/v)	EPA-21 TO-14A
Toluene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
2-Hexanone	ND	30	ppb(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	2.0	ppb(v/v)	EPA-21 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 **Work Order #...:** F6VVC1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Styrene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Bromoform	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	2.0	ppb(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	10	ppb(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	2.0	ppb(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	20	ppb(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	4.0	ppb(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 Work Order #...: F6RWA1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M3L160000-384 F6RWA1AD-LCSD
Prep Date.....: 12/15/03 Analysis Date..: 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	90	(70 - 125)			EPA-21 TO-14A
	90	(70 - 125)	0.32	(0-20)	EPA-21 TO-14A
Methylene chloride	82	(75 - 120)			EPA-21 TO-14A
	83	(75 - 120)	1.1	(0-20)	EPA-21 TO-14A
Trichloroethene	80	(70 - 125)			EPA-21 TO-14A
	80	(70 - 125)	0.18	(0-20)	EPA-21 TO-14A
Toluene	87	(75 - 125)			EPA-21 TO-14A
	80	(75 - 125)	9.2	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	89	(65 - 130)			EPA-21 TO-14A
	89	(65 - 130)	0.30	(0-20)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 Work Order #...: F6RWA1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M3L160000-384 F6RWA1AD-LCSD
Prep Date.....: 12/15/03 Analysis Date..: 12/15/03
Prep Batch #...: 3350384
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	59.2	53.1	ppb(v/v)	90		EPA-21 TO-14A
	59.2	53.2	ppb(v/v)	90	0.32	EPA-21 TO-14A
Methylene chloride	58.7	47.9	ppb(v/v)	82		EPA-21 TO-14A
	58.7	48.5	ppb(v/v)	83	1.1	EPA-21 TO-14A
Trichloroethene	59.5	47.7	ppb(v/v)	80		EPA-21 TO-14A
	59.5	47.8	ppb(v/v)	80	0.18	EPA-21 TO-14A
Toluene	55.7	48.7	ppb(v/v)	87		EPA-21 TO-14A
	55.7	44.5	ppb(v/v)	80	9.2	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	55.4	49.5	ppb(v/v)	89		EPA-21 TO-14A
	55.4	49.4	ppb(v/v)	89	0.30	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 Work Order #...: F6VVC1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M3L170000-290 F6VVC1AD-LCSD
Prep Date.....: 12/16/03 Analysis Date..: 12/16/03
Prep Batch #...: 3351290
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	100	(70 - 125)			EPA-21 TO-14A
	91	(70 - 125)	10	(0-20)	EPA-21 TO-14A
Methylene chloride	90	(75 - 120)			EPA-21 TO-14A
	83	(75 - 120)	8.3	(0-20)	EPA-21 TO-14A
Trichloroethene	82	(70 - 125)			EPA-21 TO-14A
	81	(70 - 125)	1.5	(0-20)	EPA-21 TO-14A
Toluene	90	(75 - 125)			EPA-21 TO-14A
	87	(75 - 125)	2.8	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	88	(65 - 130)			EPA-21 TO-14A
	88	(65 - 130)	0.34	(0-20)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E3L100341 Work Order #...: F6VVC1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M3L170000-290 F6VVC1AD-LCSD
Prep Date.....: 12/16/03 Analysis Date..: 12/16/03
Prep Batch #...: 3351290
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	59.2	59.2	ppb(v/v)	100		EPA-21 TO-14A
	59.2	53.6	ppb(v/v)	91	10	EPA-21 TO-14A
Methylene chloride	58.7	52.6	ppb(v/v)	90		EPA-21 TO-14A
	58.7	48.4	ppb(v/v)	83	8.3	EPA-21 TO-14A
Trichloroethene	59.5	48.8	ppb(v/v)	82		EPA-21 TO-14A
	59.5	48.1	ppb(v/v)	81	1.5	EPA-21 TO-14A
Toluene	55.7	50.1	ppb(v/v)	90		EPA-21 TO-14A
	55.7	48.7	ppb(v/v)	87	2.8	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	55.4	48.7	ppb(v/v)	88		EPA-21 TO-14A
	55.4	48.9	ppb(v/v)	88	0.34	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: ~~12325~~ 9423-BB /
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03-SG-1834
SITE LOCATION: MU53-1

VFR ID: _____
Duration of comp _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	12-2-03	SL
INITIAL FIELD VACUUM	0930	29"	12-5-03	BW
FINAL FIELD READING	0935	3"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION

INITIAL VACUUM (PSIA)	12.70	12-12-3	L
FINAL PRESSURE (PSIA)	23.11	12-12-3	L

COMMENTS:
Canister serial number on this sheet was changed to match the canister number that was sent

(HOURS)	(ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
10	7.92 – 8.3
12	6.6 – 6.9

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 04325
DATE CLEANED: 11-25 03B
CLIENT SAMPLE #: 03-SG-F835
SITE LOCATION: MW53-2

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	0939	28"	12-5-03	BN
FINAL FIELD READING	0942	2"	12-5-03	BN

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12-66	12-12-3	–
FINAL PRESSURE (PSIA)	24 35	12-12-3	–

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: C4416
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03-SG-1836
SITE LOCATION: INWS3-3

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	0945	27"	12-5-03	BN
FINAL FIELD READING	0947	2"	12-5-03	BN

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.72	12-12-3	—
FINAL PRESSURE (PSIA)	24.44	12-12-3	—

Pressurization Gas: N_2

COMMENTS.

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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4

SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 1552
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03-SG-1837
SITE LOCATION: MW53-4

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	0951	27"	12-5-03	BW
FINAL FIELD READING	0952	2"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.69	12-12-3	
FINAL PRESSURE (PSIA)	24.11	12-12-3	

Pressurization Gas: N_2

COMMENTS

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 0194
DATE CLEANED: 11-25-03
CLIENT SAMPLE #: 03 SG-1838
SITE LOCATION: 117W535

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1000	26"	12-5-03	BW
FINAL FIELD READING	1003	1"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.72	12-12-3	–
FINAL PRESSURE (PSIA)	24.20	12-12-3	–

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 93258
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03SG-1839
SITE LOCATION: MW53-6

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1006	26"	12-5-03	BW
FINAL FIELD READING	1008	1"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.74	12-12-3	L
FINAL PRESSURE (PSIA)	24.54	12-12-3	L

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 96CtB
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03SG-1840
SITE LOCATION: MWS1-1

VFR ID: _____
Duration of comp _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
	1025	26		BW
FINAL FIELD READING	1028	0"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.84	12-12-3	
FINAL PRESSURE (PSIA)	23.93	12-12-3	

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
1	79.2 – 83.3
10	7.92 – 8.3
12	6.6 – 6.9

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 12180
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03-SG-1841
SITE LOCATION: MW51-2

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1032	26	12-5-03	BW
FINAL FIELD READING	1035	1"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.80	12-12-3	L
FINAL PRESSURE (PSIA)	24.45	12-12-3	L

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT Bechtel Bettis inc.
CANISTER SERIAL #: 9622B
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03SG-1542
SITE LOCATION: MW51-3

VFR ID: _____
Duration of comp. : _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	12-2-03	SL
INITIAL FIELD VACUUM	1038	26"	12-5-03	BW
FINAL FIELD READING	1042	1"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.84	12-12-3	"
FINAL PRESSURE (PSIA)	24.81	12-12-3	"

Pressurization Gas: N_2

COMMENTS.

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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10

SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 9101B
DATE CLEANED: 11-14-03B
CLIENT SAMPLE #: 03-36-1843
SITE LOCATION: MW51-4

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1045	26"	12-5-03	BJ
FINAL FIELD READING	1049	1"	12-5-03	BJ

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.90	12-12-3	~
FINAL PRESSURE (PSIA)	24.08	12-12-3	~

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 9 30 36
DATE CLEANED: 11-14-03B
CLIENT SAMPLE #: 03 SG- F544
SITE LOCATION: MW251-5

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1046	26"	12-5-03	BCJ
FINAL FIELD READING	1052	1"	12-5-03	BCJ

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.78	12-12-3	[illegible]
FINAL PRESSURE (PSIA)	23.44	12-12-3	[illegible]

Pressurization Gas: N_2

COMMENTS.

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: A-327
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03-36-1845
SITE LOCATION: MW1-1

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1332	26"	12-5-03	BJ
FINAL FIELD READING	1336	1"	12-5-03	BJ

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.74	12-12-03	"
FINAL PRESSURE (PSIA)	24.49	12/12-3	"

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 980188
DATE CLEANED: 11-25-03B
CLIENT SAMPLE #: 03-SG-1846
SITE LOCATION: MW1-2

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1339	27"	12-5-03	BW
FINAL FIELD READING	1342	1"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.76	12-12-3	—
FINAL PRESSURE (PSIA)	24.47	12-12-3	—

Pressurization Gas: N_2

COMMENTS.

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: GL0042
DATE CLEANED: 11-14-03B
CLIENT SAMPLE #: 03-SG-1847
SITE LOCATION: ~~[illegible]~~ mw1-3

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	12-2-03	SL
INITIAL FIELD VACUUM	1345	27"	12-5-03	BCJ
FINAL FIELD READING	1352	2	12-5-03	BCJ

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.74	12-12-3	"
FINAL PRESSURE (PSIA)	23.81	12-12-3	"

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 92066
DATE CLEANED: 11·14·03B
CLIENT SAMPLE #: 03·SL-1848
SITE LOCATION: MW1-4

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	12-2-03	SL
INITIAL FIELD VACUUM	1400	27"	12·5·03	BW
FINAL FIELD READING	1403	2"	12·5·03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.72	12-12-3	L
FINAL PRESSURE (PSIA)	24.10	12-12-3	L

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 21
DATE CLEANED: 11-14-03B
CLIENT SAMPLE #: 03-56-1849
SITE LOCATION: MW1-5

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	12-2-03	SL
INITIAL FIELD VACUUM	1350	27"	12-5-03	BW
FINAL FIELD READING	1354	2"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.74	12-12-3	[illegible]
FINAL PRESSURE (PSIA)	24.72	12-12-3	[illegible]

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: Bechtel Bettis inc.
CANISTER SERIAL #: 93111
DATE CLEANED: 11-14-03B
CLIENT SAMPLE #: 03-SG-18550
SITE LOCATION: MW1-6

VFR ID: _____
Duration of comp.: _____ hrs. / mins.
Flow setting: _____ ml/min
Initials: _____

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	12-2-03	SL
INITIAL FIELD VACUUM	1401	27"	12-5-03	BW
FINAL FIELD READING	1406	2"	12-5-03	BW

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.72	12-12-3	[illegible]
FINAL PRESSURE (PSIA)	24.25	12-12-3	[illegible]

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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CANISTER QC CERTIFICATION

SEVERN TRENT STL

Certification Type: TO-14A

Date Cleaned/Batch: 11-25-03 B

Date of QC: 11-26-03

Data File Number: MB112602 (MSB)

Canister ID Numbers

* 9606 B	9801 BB
A-327	12180
93258	04325
9423 BB	C144
12325	04416
1552	9622 B

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

D. [illegible] — Reviewed By:

11-26-3 — Date:

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STL Los Angeles

AIR TOXICS - TO-14A/TO-15 MEDIUM LEVEL

Data file : \\LAPC065\MSB_DD\chem\gcmsb.i\031126.b\MB11262.D
Lab Smp Id: BLANK Client Smp ID: BLANK
Inj Date : 26-NOV-2003 19:39
Operator : DLK Inst ID: gcmsb.i
Smp Info : BLANK,BLANK,9606B
Misc Info : 1,1,500,500,3,,BLANK,TO14A.sub,0,
Comment :
Method : \\LAPC065\MSB_DD\chem\gcmsb.i\031126.b\TO14A.m
Meth Date : 26-Nov-2003 10:06 almagroa Quant Type: ISTD
Cal Date : 25-NOV-2003 09:37 Cal File: IC11256.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO14A.sub
Target Version: 4.04
Processing Host: LAPC065

Concentration Formula: Amt * DF * (FinalPres / InitPres)*(CalVol / SmpVol)

Name	Value	Description
DF	1.000	Dilution Factor
FinalPres	1.000	FinalPres
InitPres	1.000	InitPres
CalVol	500.000	CalVol
SmpVol	500.000	SmpVol

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
* 55 Bromochloromethane	49	8.266	8.281	(1.000)	1302676	50.0000	(Q)
$ 64 1,2 Dichloroethane-d4	65	9.304	9.310	(0.921)	1655536	49.1227	49.12
* 71 1,4 Difluorobenzene	114	10.099	10.104	(1.000)	4256752	50.0000	
$ 86 Toluene-d8	100	12.725	12.731	(1.260)	2053524	49.0019	49.00
* 98 Chlorobenzene-d5	117	15.379	15.385	(1.000)	3219581	50.0000	(Q)
$ 112 4-Bromofluorobenzene	95	17.636	17.641	(1.147)	2714982	41.4377	41.44(Q)

QC Flag Legend

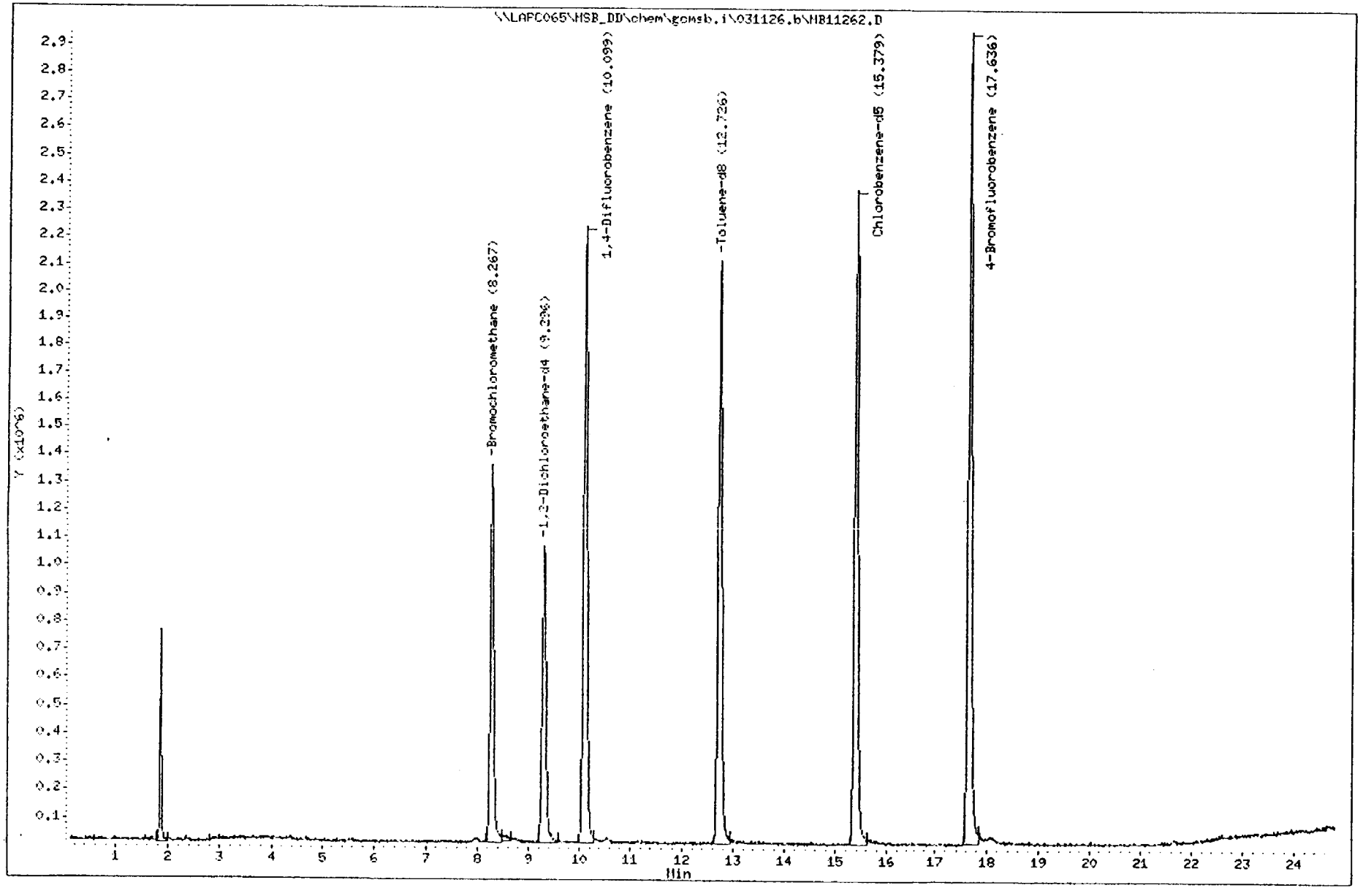
Q - Qualifier signal failed the ratio test.

Data File: \\LAPC065\MSB_DD\chem\gcmsb.i\031126.b\MB11262.D
Date : 26-NOV-2003 19:39
Client ID: BLANK
Sample Info: BLANK,BLANK,9606B

Column phase: J&W DB-624

Instrument: gcmsb.i

Operator: DLK
Column diameter: 0.53



E3L100341

CANISTER QC CERTIFICATION

SEVERN TRENT STL

Certification Type: TO-14A

Date Cleaned/Batch: 11-14-03 B

Date of QC: 11-17-03

Data File Number: MB 11172

Canister ID Numbers

* 21	9101 B
GLC042	93036
92066	A-302
9317 BB	03862
93111	12210
9610 BB	93172

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

AA
Reviewed By:

11-18-03
Date:

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STL LOS ANGELES

AIR TOXICS - TO-14A/TO-15 MEDIUM LEVEL

Data file : \\LAPC063\MSA_DD\chem\gcmsa.i\031117.b\MB11172.D
Lab Smp Id: BLANK Client Smp ID: BLANK
Inj Date : 18-NOV-2003 04:48
Operator : DLK Inst ID: gcmsa.i
Smp Info : BLANK,BLANK,#21
Misc Info : 1,1,500,500,3,,BLANK,TO14ALONG.sub,0,
Comment :
Method : \\LAPC063\MSA_DD\chem\gcmsa.i\031117.b\TO14A.m
Meth Date : 17-Nov-2003 14:42 almagroa Quant Type: ISTD
Cal Date : 09-OCT-2003 13:21 Cal File: IC10096.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TO14ALONG.sub
Target Version: 4.04
Processing Host: LAPC063

Concentration Formula: Amt * DF * (FinalPres / InitPres)*(CalVol / SmpVol)

Name	Value	Description
DF	1.000	Dilution Factor
FinalPres	1.000	FinalPres
InitPres	1.000	InitPres
CalVol	500.000	CalVol
SmpVol	500.000	SmpVol

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ppbv)	FINAL (ppbv)
• 55 Bromochloromethane	49	8.687	8.700	(1.000)	1440899	50.0000	
$ 64 1,2-Dichloroethane-d4	65	9.689	9.701	(0.927)	1193780	45.3791	45.38
• 71 1,4-Difluorobenzene	114	10.447	10.459	(1.000)	3759992	50.0000	
$ 86 Toluene-d8	100	13.009	13.022	(1.245)	1825393	49.7835	49.78
• 98 Chlorobenzene-d5	117	15.626	15.638	(1.000)	2939784	50.0000	
$ 112 4-Bromofluorobenzene	95	17.845	17.858	(1.142)	3094267	43.0869	43.09

Data File: \\LAPC063\MSA_DD\chem\gcmsa.i\031117.B\MB11172.D

Date : 18-NOV-2003 04:48

Client ID: BLANK

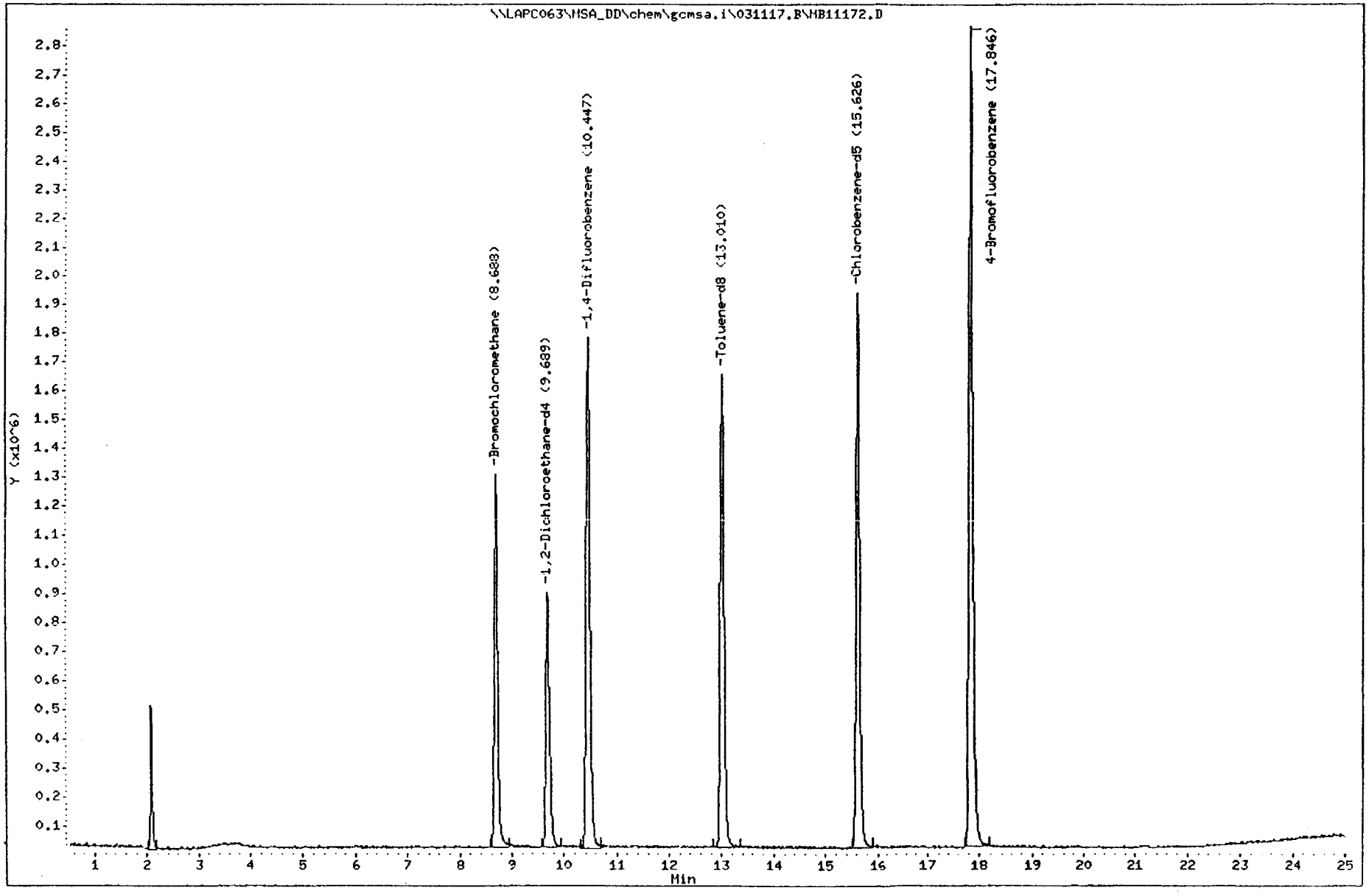
Sample Info: BLANK,BLANK,#21

Column phase: J&W DB-624

Instrument: gcmsa.i

Operator: DLK

Column diameter: 0.53



E3L100341