HALEY & ALDRICH

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

TECHNICAL MEMORANDUM
Summary Report of Extended Soil Vapor Extraction Pilot Test Results

To: **Mr. Brian Mossman**
Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

From: **Haley & Aldrich, Inc.**

Date: **September 26, 2002**

Re: **Summary Report of Extended Soil Vapor Extraction Pilot Test Results, Boeing Realty Corporation, Former C-6 Facility – Parcel C, Building 2, Los Angeles, California**

Haley & Aldrich, Inc. (Haley & Aldrich) has prepared this report to summarize extended soil vapor extraction (SVE) pilot test activities conducted at the former Boeing C-6 Facility (subject property), in Los Angeles, California. The location of the Site is shown on Figure 1. Beginning on November 27, 2001, extended pilot testing has been conducted in the former Building 2 Area. The extended pilot test system is currently operating and activities are expected to be completed by the end of the year. This summary report has been prepared in accordance with the Regional Water Quality Control Board, Los Angeles Region (LARWQCB) October 9, 2001 approval letter. This report summarizes system operations, field measurements, vapor sampling and analysis, extraction well optimization, mass removal, and regression analysis for extended pilot test data collected to-date.

BACKGROUND

Laboratory results for soil samples collected in the former Building 2 area at the subject property indicated the presence of volatile organic compounds (VOCs) at depth requiring remediation to prevent possible impact to groundwater. Based on the results of the investigation, shallow occurrences of impacted soil (less than 12 feet below ground surface) were excavated and disposed of at an approved facility. SVE was recommended for the remediation of deep impacted soil. Haley & Aldrich was contracted by BRC to install and operate an extended SVE pilot test to obtain data for the evaluation of using SVE as a full-scale remedy. A workplan for the pilot test activities in the Building 2 area dated September 14, 2001 was submitted and approved by the LARWQCB on September 19, 2001.

EXTENDED PILOT TEST DESCRIPTION

The Building 2 extended pilot test system consists of twenty 2-inch diameter, PVC, single and dual-completion SVE wells, a trailer-mounted, 800-actual cubic feet per minute blower system, two 3,000-lb granular activated carbon (GAC) vapor control vessels (primary and secondary), and associated piping. VOC-laden vapors are drawn from subsurface soils by a vacuum produced by the blower. Vapors are transferred from the wells to the SVE system by above ground piping. The extracted airstream passes through a liquid separator and the two GAC beds under vacuum, where VOCs adsorb onto the GAC, through the blower, and is discharged to the atmosphere through a vertical stack. The blower automatically shuts off if a high liquid level is present in the separator or if low airflow is detected in the influent line. GAC is replaced when field or laboratory vapor measurements exceed regulatory criteria or indicate that one of the beds has experienced breakthrough. Haley & Aldrich performs routine system maintenance and data collection on a weekly basis.

Haley & Aldrich installed fifteen initial pilot test wells in September 2001 and began system operation on November 27, 2001. Two additional dual-completion extraction wells (2-VEW-16A/B and 2-VEW-17A/B) were installed on May 1, 2002 and three single completion wells (2-VEW-18, 19 and 20) were installed on August 1, 2002 to enhance VOC recovery rates. Extraction wells are screened in intervals where soil impacts have been identified by previous subsurface investigations.

The South Coast Air Quality Management District (SCAQMD) issued a various locations Permit to Construct/Operate, A/N 389510, on October 12, 2001. The permit has subsequently been revised and the system now operates under various locations permit A/N 401433, issued on June 7, 2002.

The location of the Building 2 pilot test system is shown on Figure 2. The well field layout, including well screen depths is shown on Figure 3. Boring logs and well construction diagrams for the vapor extraction wells and confirmation borings are included in Appendix A.

EXTENDED PILOT TEST SVE OPERATION SUMMARY

Hours of Operations (through August 2002)	6,057
Available Hours of Operation	6,660
Operational Time (%)	91
Cumulative Mass Removed (lbs.)	2,810

OPERATION INFORMATION

Operational data and VOC mass removal for the extended SVE pilot test system are tabulated and shown graphically in Graphs 1 through 5. The system operation timeline for the period is as follows:

- November 27, 2001 — System was started
- December 28, 2001 — System shut down, one GAC vessel was changed out (3,000 lbs.), system restarted
- January 10, 2002 — System shut down due to carbon breakthrough
- January 17, 2002 — One GAC vessel changed out (3,000 lbs.), system restarted
- January 27, 2002 — System shut down due to high knockout water level
- January 29, 2002 — Water removed from knockout and system restarted
- January 30, 2002 — Blower drive belt broke, system shut down
- January 31, 2002 — One GAC vessel was changed out (3,000 lbs.), blower drive belt replaced, system restarted
- February 8, 2002 — One GAC vessel changed out (3,000 lbs.), system restarted

• February 21, 2002	One GAC vessel changed out (3,000 lbs.), system restarted
• March 6, 2002	One GAC vessel changed out (3,000 lbs.), system restarted
• March 20, 2002	One GAC vessel was changed out (3,000 lbs.), system restarted
• March 29, 2002	Began 14-day monitoring program under permit A/N 398264
• April 4, 2002	System shutdown, two GAC vessels were changed out (6,000 lbs), system restarted
• April 14, 2002	System shutdown unattended due to low flow switch
• April 17, 2002	System restarted
• May 1, 2002	System shutdown due to carbon breakthrough, Wells 2-VEW-16 and 2-VEW-17A and B were added to the system to enhance VOC recovery
• May 2, 2002	One GAC vessel was changed out (3,000 lbs), system restarted
• May 16, 2002	System shutdown, one GAC vessel was changed out (3,000 lbs), system restarted
• June 7, 2002	SCAQMD issued a new permit A/N 401433
• June 13, 2002	System shutdown, one GAC vessel was changed out (3,000 lbs), system restarted
• July 16, 2002	System shutdown, upon receipt of laboratory data
• July 17, 2002	System shutdown, one GAC vessel was changed out (3,000 lbs), system restarted
• July 23, 2002	System shutdown, hoses switched and readings taken for clarification on primary vessel, system restarted
• July 26, 2002	System shutdown, blower oil change, system restarted
• July 30, 2002	System shutdown, hoses switched back to original position, System restarted
• August 1, 2002	Wells 2-VEW-18, -19, and -20 added to system to enhance VOC recovery
• August 27, 2002	System shutdown
• August 28, 2002	One GAC vessel was changed out (3,000 lbs), system restarted

The process flowrates ranged from approximately 535 to 740 standard cubic feet per minute (scfm) and inlet vacuums ranged from approximately 20 to 68 inches of water column. To-date, the system has operated with an up-time efficiency of 91% (Graph 1) and has removed a total of approximately 2,810 lbs. of VOCs (Graph 2) over 6,057 hours of operation. A total of fourteen GAC changeouts, 3,000 lbs. each, were conducted during this period. The various locations SCAQMD permit was modified in March 2001 (A/N 398264) to allow an increase in total flow rate to 890 scfm. A second SCAQMD revision to the permit (A/N 401433) was issued in June 2002 to revise allowable exhaust concentrations of VOCs.

Approximately 1,000 gallons of water were collected from the pipes and separator during pilot testing. Multiple 55-gallon drums were used to store knockout water during the period. A double-contained polyethylene tank was installed at the site to temporarily store knockout water in August 2002. Knockout water is removed from the site by Boeing in accordance with state and federal regulations.

VOC vapors were drawn from individual wells with valves open to optimize flow rates and concentrations at each of the wellheads. Individual optimal SVE well flow rates ranged from approximately 5 to 200 scfm based on operating conditions. Well optimization is discussed further below.

VAPOR SAMPLING AND ANALYSIS

Since November 2001, thirty-four vapor samples were collected in Tedlar bags from the process air stream (inlet to primary GAC vessel and exhaust from the secondary GAC vessel) and delivered to a state-certified laboratory for analysis. These samples were collected for SCAQMD permit compliance as well as system performance evaluation. The vapor samples were collected using a Tedlar bag in a vacuum case. Laboratory analyses were conducted on vapor grab samples using EPA Method 8260B/TO-14A. The full results of the vapor sampling are summarized in Table 1.

Based on the results of the laboratory analysis of vapor grab samples, maximum inlet VOC concentrations as parts-per-billion by volume (ppbv) during the pilot test are as follows:

- Trichloroethene (TCE) 31,000 ppbv
- 1,1-Dichloroethene (1,1-DCE) 2,800 ppbv
- 2-Butanone (MEK) 960 ppbv
- 1,1,1-Trichloroethane (1,1,1-TCA) 800 ppbv
- Chloroform 780 ppbv
- Toluene 520 ppbv
- 1,1-Dichloroethane (1,1-DCA) 220 ppbv
- cis-1,2-Dichloroethene (cis-1,2-DCE) 210 ppbv
- Tetrachloroethene (PCE) 190 ppbv
- Acetone 150 ppbv
- Methylene Chloride 110 ppbv
- Carbon tetrachloride 29 ppbv
- Trichlorofluoromethane 64 ppbv
- Xylene 18 ppbv

Reported influent concentrations varied during the period due to system optimization efforts and a general reduction in measured concentrations.

FIELD MEASUREMENTS

VOC concentrations were measured with a photoionization detector (PID) and/or flame ionization detector, calibrated to 100 parts-per-million by volume (ppmv) hexane, as per the SCAQMD permit requirements, at the undiluted inlet, diluted inlet, between the GAC vessels, and at the exhaust stack as shown in Table 2. Flowrates were measured with a hand-held TSI Veloci-calc Plus hot-wire anemometer or by measuring the pressure differential across an orifice plate. Additional measurements were collected during operations including vacuum readings at each extraction well, pressures at the GAC vessels, and blower exhaust temperature. The field influent VOC measurements are plotted in Graph 3.

RADIUS OF INFLUENCE

Radius of influence is an effective means of predicting the extent of soil influenced by soil vapor extraction. To calculate a radius of influence, vacuum readings were collected from the fifteen original vapor extraction wells during the first two weeks of operation in 2001. Soil vapor extraction wells 2-VEW-3B, 7B, 11B and 14B were opened and vacuum readings were collected from each of the closed vapor extraction wells. Each vacuum reading collected from closed wells was normalized to the vacuum reading from the nearest open extraction well. The results were plotted on a lognormal graph and fit with an exponential trendline.

The results of the best-fit exponential trendline indicate that 10% of the normalized vacuum from 2-VEW-11B

and 14B could be measured at a distance of 95 feet from an extraction well. This distance was extended to approximately 200 feet at 1% of the normalized vacuum from these same wells. The results from wells 2-VEW-3B and 7B predicted a 75-foot radius of influence at a 10% normalized vacuum and a 185-foot radius of influence at a 1% normalized vacuum as shown in Figure 4. Tabulated radius of influence calculations are presented in Appendix B.

EXTRACTION WELL OPTIMIZATION

Data collection and adjustment of extraction well flow rates began in November 2001. Well optimization continued during 2002. Weekly rounds of VOC concentrations were measured at each extraction well by a PID at various flowrates during the pilot test as shown in Table 3. These data were used to establish the flow regime under which maximum VOC concentrations can be extracted from the wells. Wells exhibiting lower concentrations, which do not significantly contribute to mass removal, were closed so that the available SVE system flow capacity could be used for the higher concentration wells. Figure 5 illustrates the remediation progress since November 2001

ESTIMATED SVE OPERATION DURATION

To predict the asymptotic VOC concentrations and identify the time at which continued operation becomes impractical, a regression analysis of available data was performed and refined. Tabulated calculations for the regression analysis are presented in Appendix C.

Undiluted influent vapor concentration data was used in the regression analysis to estimate the remaining period of operation for the Building 2 SVE system, based on concentration targets. The analysis was conducted according to the following regression equation:

An average rate constant for the group was calculated as follows:

$$C_t = C_o e^{(-kt)}$$

Where:

C_t = concentration (ppmV) at time t (days)
C_o = initial regressed concentration (ppmV)

Based on data collected through the end of August 2002, a 90% reduction in the initial regressed well concentrations occurred in April 2002 (Graph 4). Measured concentrations have decreased at least 90% in most of the wells based on third quarter 2002 monitoring. A 99% reduction in the initial regressed well concentrations was recorded in July and August 2002.

EXTENDED PILOT TEST SOIL SAMPLING

In August 2002, Haley & Aldrich collected soil samples in the vicinity of selected previous Building 2 soil characterization sampling locations within the SVE wellfield to evaluate in-situ soil concentration reductions. Samples were collected from borings advanced with hollow-stem auger drilling equipment and submitted to a State-certified analytical laboratory for analysis by EPA Method 8260B. Concentrations of TCE detected in confirmation samples were compared with pre-remediation concentrations to determine the effectiveness of the extended pilot test SVE system as illustrated in Figure 6. Table 4 summarizes analytical results for TCE in pre-pilot test Building 2 soil borings and recent soil sampling locations.

Based on the results of the laboratory analyses of soil samples collected from pilot test confirmation borings near

the above locations, TCE concentrations ranged from non-detectable to 380 ug/kg. The observed concentration reduction was approximately 98% or greater in most cases demonstrating the effectiveness of SVE operation.

Three of the five borings advanced were converted to vapor extraction wells (2-VEW-18 through 2-VEW-20) to increase subsurface air flow around SVE wells with elevated VOC concentrations.

PLANNED FUTURE ACTIVITIES

The extended SVE pilot test will continue operation on SVE wells selected to maximize mass removal. GAC changeouts will be conducted as necessary. Since the SVE system has proceeded beyond the 99% concentration reduction point and in-situ soil concentrations have been reduced up to 98% system shut-down, rebound evaluation, and final closure sampling may be initiated in Fall, 2002.

We appreciate the opportunity to provide environmental consulting services on this project. Please do not hesitate to call if you have any questions or comments.

Sincerely yours,
HALEY & ALDRICH, INC.

Richard M. Farson, PE
Senior Engineer

Scott P. Zachary
Vice President

Enclosures:

Figure 1 – Site Location Map
Figure 2 – SVE System Locations Building 1/36 and Building 2
Figure 3 – Building 2 SVE Pilot Test System Diagram
Figure 4 – Building 2 Normalized Vacuum Radius of Influence for Wells 11 B and 14B
Figure 5 – Building 2 SVE Contours, November 2001-September 2002
Figure 6 – Pre-SVE and August 2002 Soil Sampling Locations and Results

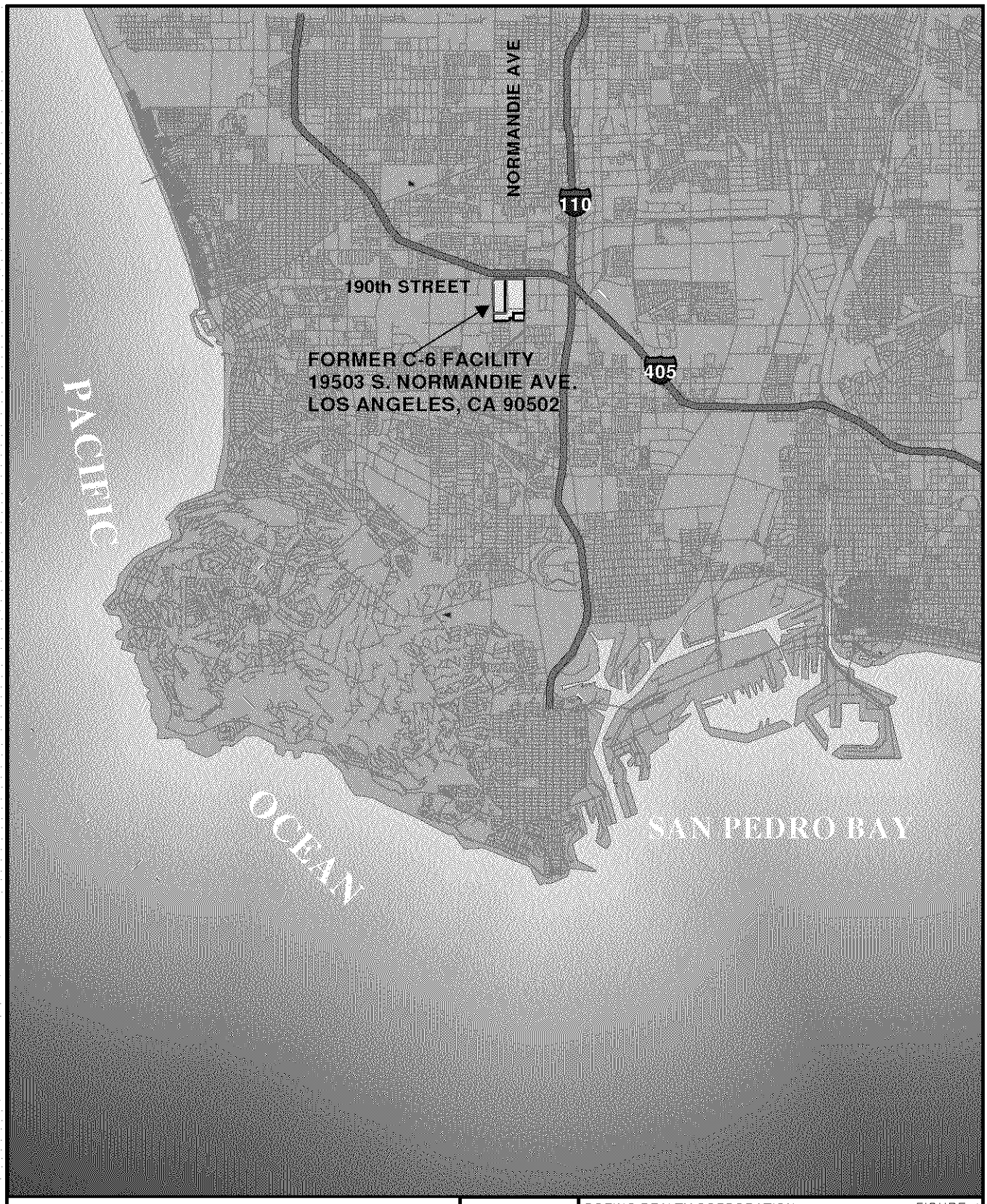
Table 1 – Building 2 SVE System Influent Laboratory Data
Table 2 – Building 2 SVE System Field Data
Table 3 – Building 2 SVE System Well Field Data
Table 4 – Building 2 SVE System Extended Pilot Test Soil Sampling Results

Graph 1 – Building 2 SVE Monthly Percent Operation
Graph 2 – Cumulative Volatile Organic Compound Mass Removed
Graph 3 – Building 2 SVE System Total VOC Influent Concentrations
Graph 4 – Building 2 SVE System Regression Analysis, Concentration Reduction

Appendix A – Soil Vapor Extraction Boring Logs
Appendix B – Tabulated Radius of Influence Calculations
Appendix C - Tabulated Regression Analyses Calculations
Appendix D – CD-ROM with Analytical Laboratory Results

cc: John Scott, Boeing
Stephanie Sibbett, Boeing
File

G:\Projects\Environmental\28997\Bldg2_Pilot_Test_Report\Bldg2_Pilot_Test_Report_FINAL



N

2 1 0 2 Miles

27936-002

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

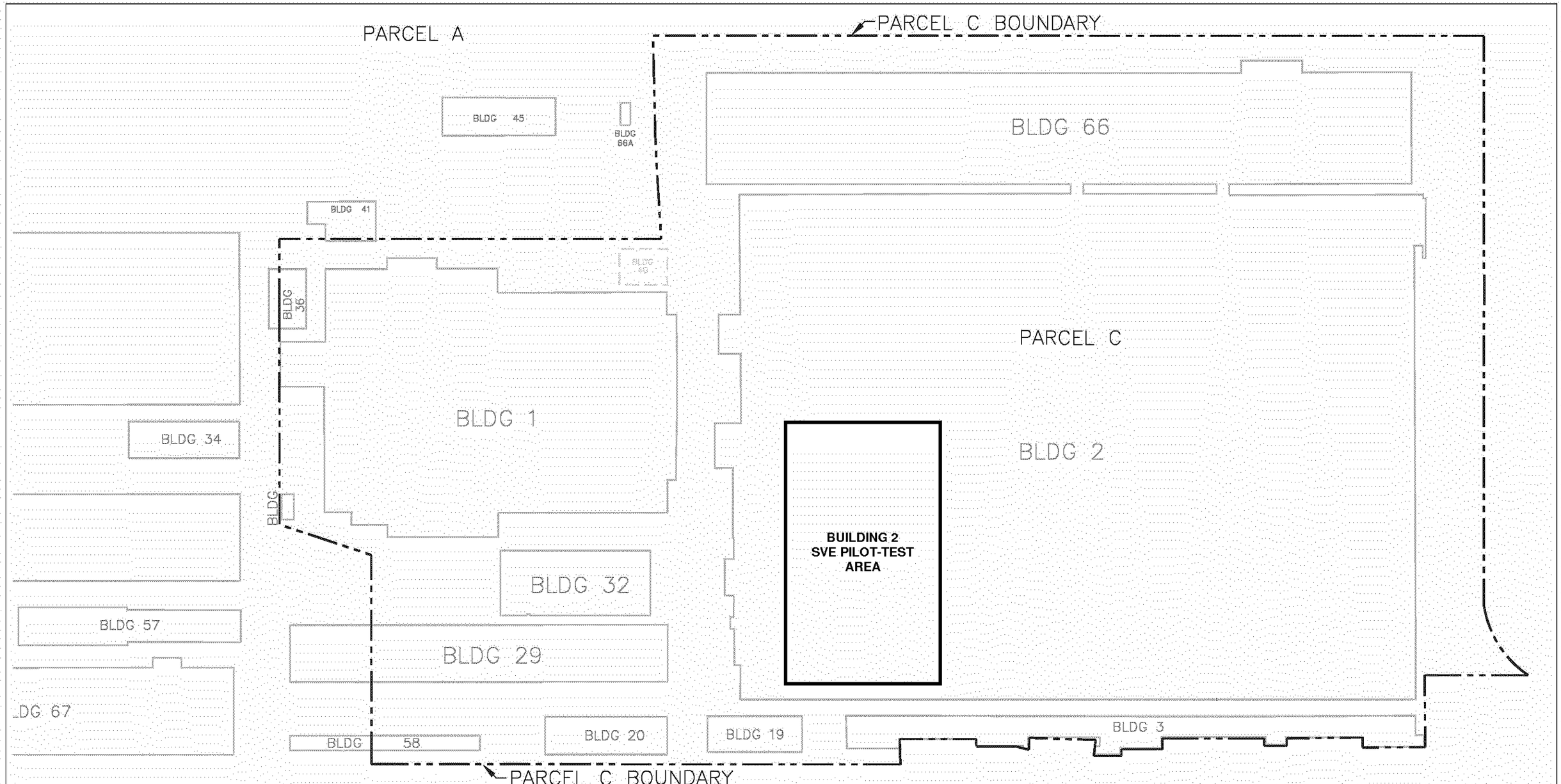
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE 1

SITE LOCATION MAP

SCALE AS SHOWN

AUGUST 2002



N

0 20 40 80

FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

SOURCE OF BASEMAP: KENNEDY JENKS CONSULTANTS, 2000, SAMPLING AND ANALYSIS PLAN, BOEING REALTY CORPORATION'S C-6 FACILITY, PARCEL C, LOS ANGELES, CA, AUGUST 16, 2000.

28997B04-AC

HALEY & ALDRICH

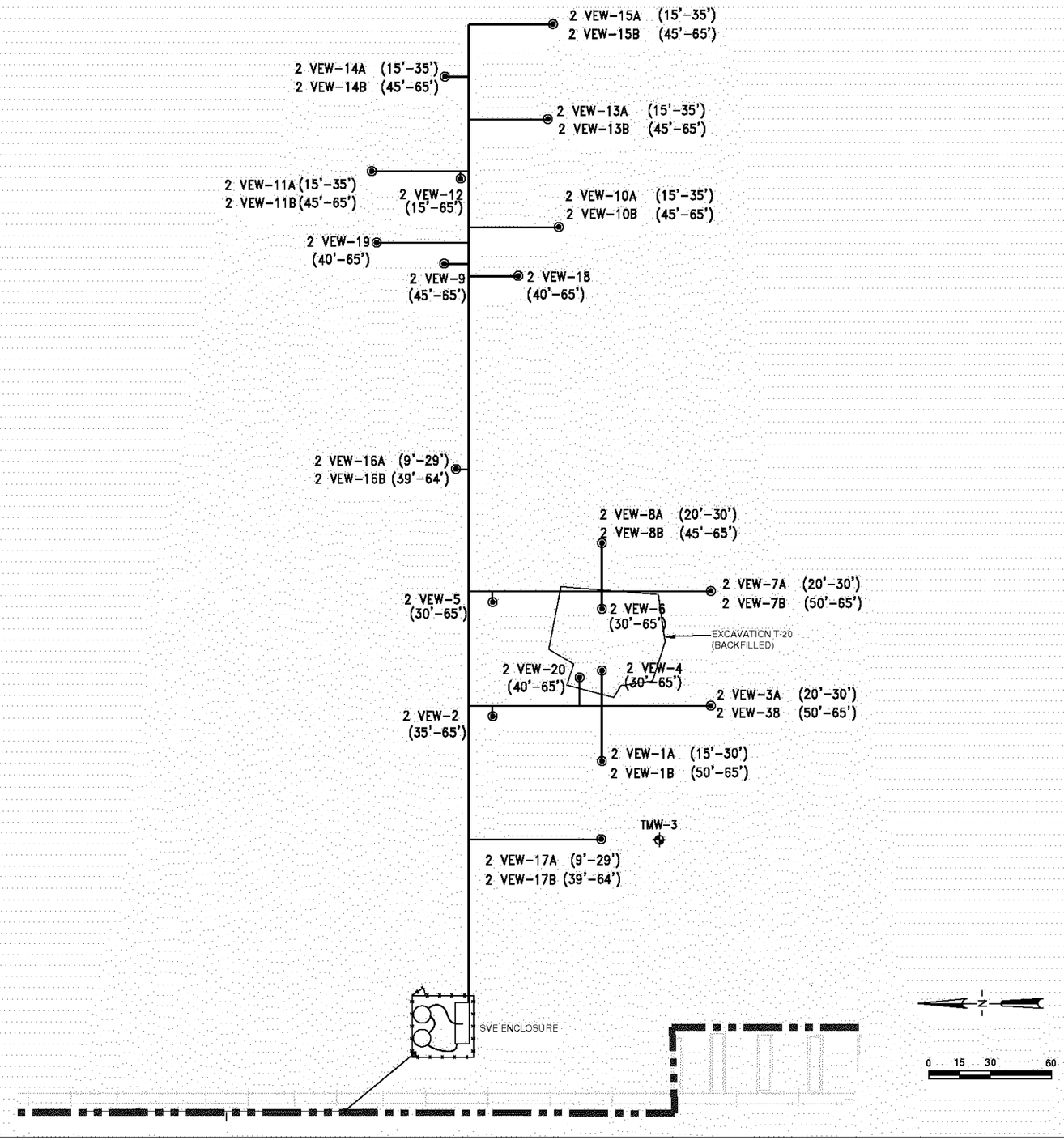
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE: 2

BUILDING 2 SVE SYSTEM LOCATION

SCALE: AS SHOWN	QA/QC:	PROJECT: 28997
DRAWN: SAL	REVIEWED: RMF	DATE: 26 SEPT 2002



LEGEND

⊙	VAPOR EXTRACTION WELL
⊕	GROUNDWATER MONITDR WELL
——	ABOVE-GROUND PIPING
(15'-30')	SCREENED INTERVALS (FEET BELOW GROUND SURFACE)
PPMV	PARTS PER MILLION BY VOLUME

HALEY & ALDRICH
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

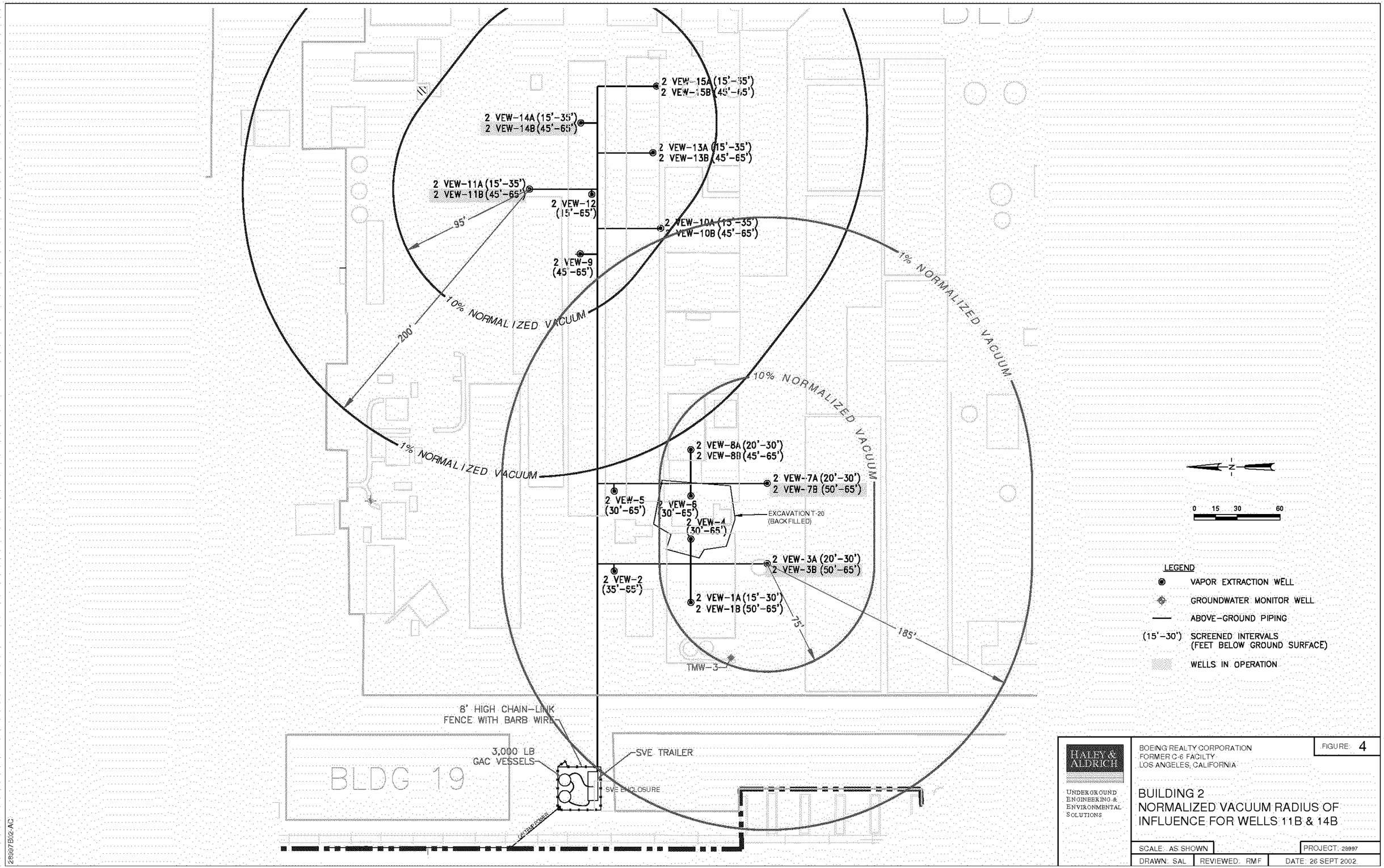
BOEING REALTY CORPORATION
FORMER C-6 FACILTY
LOS ANGELES, CALIFORNIA

FIGURE: 3

BUILDING 2 SVE PILOT TEST SYSTEM

SCALE: AS SHOWN | PROJECT: 28997
DRAWN: SAL | REVIEWED: RMF | DATE: 26 SEPT 2002

28997B03.AC



HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

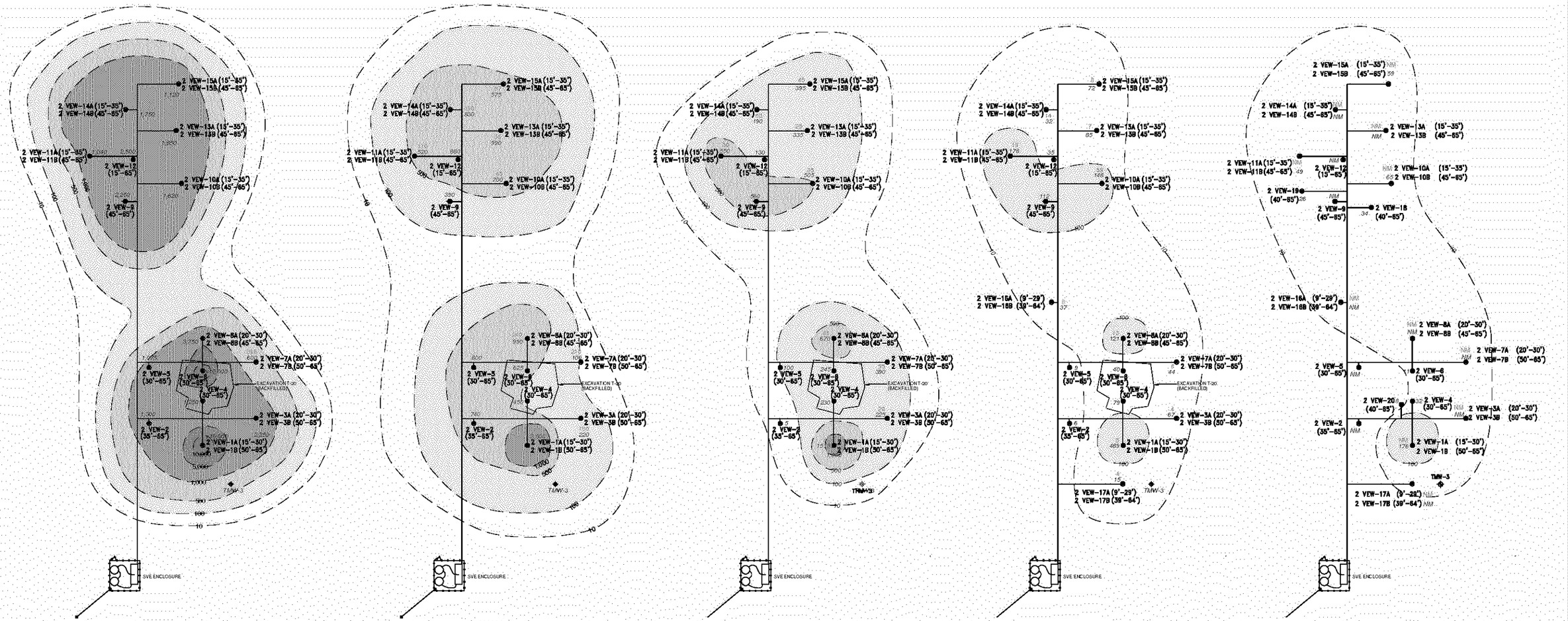
BOEING REALTY CORPORATION
FORMER C-6 FACILTY
LOS ANGELES, CALIFORNIA

FIGURE: 4

BUILDING 2
NORMALIZED VACUUM RADIUS OF INFLUENCE FOR WELLS 11B & 14B

SCALE: AS SHOWN | PROJECT: 28997

DRAWN: SAL | REVIEWED: RMF | DATE: 26 SEPT 2002



LEGEND

	SHALLOW		SVE – 10 PPMV – 100 PPMV
	DEEP		SVE – 101 PPMV – 500 PPMW
●	VAPOR EXTRACTION WELL		SVE – 501 PPMV – 1,000 PPMV
◆	GROUNDWATER MONITOR WELL		SVE – 1,001 PPMV – 5,000 PPMW
—	ABOVE-GROUND PIPING		SVE – 5,001 PPMV – 10,000 PPMV
(15'–30')	SCREENED INTERVALS (FEET BELOW GROUND SURFACE)		SVE – 10,001+ PPMV
PPMV	PARTS PER MILLION BY VOLUME	— —	SVE CONCENTRATION CONTOUR

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

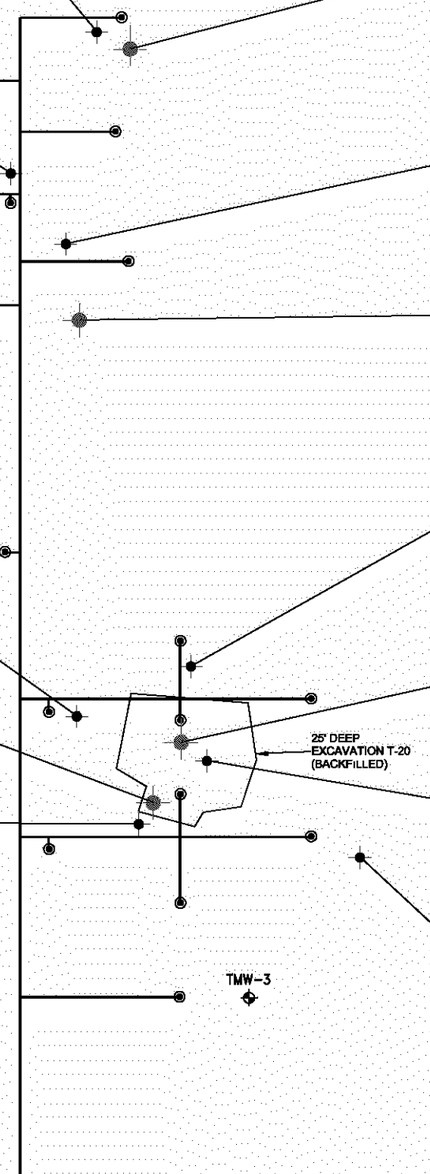
BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

SVE CONTOURS
NOVEMBER 2001 - SEPTEMBER 2002

NOT TO SCALE

FIGURE 5
26 SEPT 2002

28997B05-AC



C-2-143	6/1/01
20'	79
25'	160
30'	ND
40'	ND
50'	450

C-2-26	5/4/01
25'	400
30'	140
40'	290
50'	240

C-2-26-1	6/1/01
25'	160
30'	7.2
40'	ND
50'	200

2-VEW-19	8/1/02
25'	ND
40'	ND
50'	ND

S24-7	5/22/01
20'	42
25'	4.7 J
30'	ND
40'	3.3 J
50'	69

2-VEW-20	8/1/02
25'	ND
40'	ND
50'	ND

S24-5	5/10/01
20'	58
25'	3.8 J
30'	ND
40'	64
50'	82,000

SB1000	8/1/02
25'	ND
40'	ND
50'	3.6 J

C-2-26-2	6/1/01
25'	2.9 J
30'	3.5 J
40'	ND
50'	130

2-VEW-18	8/1/02
25'	ND
40'	ND
50'	ND

S24-4	5/10/01
25'	20
30'	19
40'	52
50'	150

SB1001	8/1/02
30'	ND
40'	380
50'	7.0

S24-3	5/11/01
25'	24,000
30'	ND
40'	220
50'	450

S24-6	5/10/01
20'	140
25'	48
30'	28
40'	7.6
50'	100

NOTES:
1. ALL DIMENSIONS AND LOCATIONS APPROXIMATE.
2. SURVEY DATA PROVIDED BY TAIT ENVIRONMENTAL, INC.
3. ALL CONCENTRATIONS IN UNITS OF MICROGRAMS PER KILOGRAM (ug/Kg).
4. THE SITE-SPECIFIC FIELD ACTION LEVEL (FAL) FOR TCE IS 27 ug/Kg.
5. APPROXIMATE SURFACE ELEVATION AT TIME OF INVESTIGATION WAS 51.5 FEET MSL.
6. ND = NOT DETECTED ABOVE LABORATORY METHOD 8260B DETECTION LIMIT OF 2.0 (ug/Kg).
7. J = RESULT IS BELOW LABORATORY REPORTING LIMIT (5.0 ug/Kg) AND IS ESTIMATED.

LEGEND

2BB-5-45 — PRE-SVE SOIL BORING LOCATION

TMW-9 / WCC-01S — GROUNDWATER MONITORING WELLS

AUGUST 2002 SOIL BORING LOCATION

BORING NAME — DATE SAMPLE TAKEN

2-VEW-20	8/1/02
25'	ND

DEPTH bgs — TCE CONCENTRATION IN MICROGRAMS PER KILOGRAM (µg/Kg)

N

0 15 30 60

FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

SOURCE OF BASEMAP: KENNEDY JENKS CONSULTANTS, 2000, SAMPLING AND ANALYSIS PLAN, BOEING REALTY CORPORATION'S C-6 FACILITY, PARCEL C, LOS ANGELES, CA, AUGUST 18, 2000.

28997B06-AC

HALEY & ALDRICH

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE: 6

PRE-SVE AND AUGUST 2002 SOIL SAMPLING LOCATIONS AND RESULTS

SCALE: AS SHOWN | QA/QC: TSH | PROJECT: 28997-003

DRAWN: SAL | REVIEWED: SPZ | DATE: 26 SEPT 2002

TABLE 1 - BUILDING 2 SVE SYSTEM INFLUENT LABORATORY DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

SAMPLE DATE	LAB ID	SAMPLE LOCATION	COMPOUND																	
			PCE (ppbv)	TCE (ppbv)	1,1,1 TCA (ppbv)	1,1,2 TCA (ppbv)	1,1 DCE (ppbv)	cis-1,2 DCE (ppbv)	1,1 DCA (ppbv)	1,2 DCA (ppbv)	2-Butanone (ppbv)	Chloroform (ppbv)	Acetone (ppbv)	Methylene chloride (ppbv)	Trichlorofluoro-methane (ppbv)	1,2,4 Trimethyl-benzene (ppbv)	Carbon Tetrachloride (ppbv)	4-Ethyltoluene (ppbv)	Toluene (ppbv)	Xylene (ppbv)	TNMOC (ppbv)
11/27/01	EXHAUST 11/27/01	Exhaust	2	200	3	ND	4	ND	ND	ND	4	ND	10	1	ND	1	ND	ND	14	1	ND
11/28/01	DILUTED INLET (11B, 14B)	Influent	59	4,600	13	ND	220	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND
11/28/01	EXHAUST 11/28/01	Exhaust	ND	ND	1	ND	ND	ND	ND	ND	3	ND	6	ND	ND	1	ND	ND	5	1	ND
11/29/01	EXHAUST 11/29/01	Exhaust	ND	2	ND	ND	ND	ND	ND	ND	2	ND	6	1	ND	ND	ND	ND	2	1	250
11/30/01	EXHAUST 11/30/01	Exhaust	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	2	ND	ND
12/03/01	DILUTED INLET (11B, 14B)	Influent	3	220	1	ND	19	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	450
12/03/01	EXHAUST 12/3/01	Exhaust	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	1	ND	ND
12/04/01	DILUTED INLET (11B, 14B)	Influent	100	10,000	35	ND	730	ND	ND	ND	ND	ND	ND	ND	31	ND	ND	ND	ND	ND	22,000
12/04/01	EXHAUST 12/4/01	Exhaust	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	1	ND	ND
12/05/01	DILUTED INLET (11B, 14B)	Influent	180	18,000	73	ND	1,500	ND	ND	ND	ND	ND	ND	ND	64	ND	ND	ND	ND	ND	35,000
12/05/01	EXHAUST 12/5/01	Exhaust	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	1	ND	ND
12/06/01	DILUTED INLET (11B, 14B)	Influent	260	21,000	92	ND	1,600	ND	ND	ND	ND	ND	ND	ND	59	ND	ND	ND	ND	ND	43,000
12/06/01	EXHAUST 12/6/01	Exhaust	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	1	ND	ND
01/03/02	DILUTED INLET 01/03/02	Influent	84	7,500	280	ND	660	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	20,000
01/03/02	EXHAUST 1/3/02	Exhaust	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	4	1	ND	ND	ND	ND	1	ND	ND
02/06/02	DILUTED INLET 2/6/02	Influent	210	31,000	800	ND	2,800	210	220	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	69,000
02/06/02	EXHAUST 2/6/02	Exhaust	1	20	2	ND	1	ND	ND	ND	11	ND	45	2	ND	ND	ND	1	10	3	440
03/06/02	DILUTED INLET 3/6/02	Influent	100	26,000	370	ND	1,500	120	86	ND	ND	ND	150	110	ND	ND	ND	ND	ND	ND	<500,000
03/06/02	EXHAUST 3/6/02	Exhaust	ND	3	16	ND	13	ND	ND	ND	ND	ND	ND	62	22	ND	ND	ND	12	ND	290
04/04/02	GAC0002D_AV040402_001	Influent	180	19,000	310	32	1,700	120	96	ND	ND	260	150	49	45	ND	ND	ND	ND	ND	47,000
04/04/02	GAC0002E_AV040402_001	Exhaust	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	3	1	ND	ND	ND	ND	1	1	ND
04/10/02	GAC0002E_AV041002_001	Exhaust	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	1	ND	ND	4	1	ND
04/17/02	GAC0002E_AV041702_001	Exhaust	17	1,100	5	ND	32	ND	ND	ND	ND	15	ND	5	ND	ND	ND	ND	6	6	3,100
04/17/02	GAC0002C_AV041702_001	Midpoint	16	840	25	ND	2,700	9	80	ND	ND	130	ND	49	120	ND	ND	ND	7	ND	5,600
04/23/02	GAC0002E_AV042302_001	Exhaust	ND	ND	ND	ND	78	ND	7	ND	ND	ND	ND	63	160	ND	ND	ND	4	4	1,400
05/03/02	GAC0002E_AV050302_001	Exhaust	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	2	1	ND
05/03/02	GAC0002U_AV050302_001	Influent	190	13,000	150	ND	1,600	63	57	ND	ND	360	ND	ND	44	ND	ND	ND	ND	ND	36,000
06/04/02	GAC0002E_AV060402_001	Exhaust	ND	12	35	ND	4,100	ND	110	ND	53	180	ND	34	88	ND	ND	ND	64	ND	4,800
06/04/02	GAC0002D_AV060402_001	Influent	110	6,100	560	ND	1,300	38	38	ND	960	540	ND	18	23	ND	23	ND	520	18	19,000
07/03/02	GAC0002E_AV070302_001	Exhaust	ND	ND	ND	ND	2,700	ND	67	ND	ND	260	ND	21	68	ND	ND	ND	ND	ND	3,000
07/03/02	GAC0002D_AV070302_001	Influent	80	3,800	82	ND	1,100	29	28	ND	ND	640	ND	12	30	ND	25	ND	11	ND	11
08/15/02	GAC0002E_AV081502_001	Exhaust	ND	ND	ND	ND	2,600	ND	95	ND	ND	860	ND	16	39	ND	ND	ND	ND	ND	3,500
08/15/02	GAC0002D_AV08152_001	Influent	150	4,400	81	6	930	24	27	ND	ND	780	ND	11	23	ND	29	ND	4	ND	<5,000

Notes:
ppbv = parts per billion by volume
ND = not detected
TNMOC = Total Non Methane Organic Carbons

TABLE 2 - BUILDING 2 SVE SYSTEM FIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

DATE	HOUR	TIME	UNDILUTED FLOW RATE (scfm)	DILUTED FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	DILUTED PID (2) (ppmv)	MID POINT CARBON PID (2) (ppmv)	EFFLUENT CARBON PID (2) (ppmv)	COMMENTS
11/28/01	24	13:15	75	725	28	58	0.0	0.0	
11/30/01	75	14:20	80	750	NA	60	3.6	2.0	
12/03/01	76	17:10	85	750	NA	18	0.4	0.0	
12/04/01	93	10:15	67	750	NA	98	3.0	0.0	
12/05/01	123	16:30	68	790	NA	167	1.8	0.0	
12/06/01	138	8:30	65	795	29	265	7.1	5.0	
12/07/01	161	7:30	66	795	30	245	0.5	0.2	
12/08/01	196	16:00	70	770	29	250	5.9	5.1	
12/09/01	217	13:00	190	770	30	230	4.5	0.9	
12/10/01	244	16:00	65	760	29	95	5.5	0.0	
12/11/01	263	11:00	55	760	31	310	0.2	0.0	
12/12/01	295	19:15	75	780	30	350	0.5	0.0	
12/13/01	311	11:15	69	775	30	380	0.3	0.0	
12/20/01	479	15:10	95	775	39	350	33.0	0.0	
12/28/01	647	11:00	400	770	29	480	* 8.0	0.0	GAC Changeout
1/3/2002	785	15:00	575	795	29	32	0.0	0.0	
01/10/02	953	15:00	# 150	765	25	195	51.0	0.0	GAC Changeout
01/18/02	983	18:00	350	720	53	342	0.3	0.1	
01/24/02	1124	15:10	360	735	52	380	40.2	0.0	
01/31/02	1220	15:48	400	765	38	960	NR	0.0	Data after GAC Changeout
02/01/02	1238	10:00	400	760	27	450	0.0	0.0	
02/06/02	1360	13:00	390	760	20	365	87.0	0.2	GAC Changeout
02/08/02	1385	9:20	# 190	740	45	105	43.0	0.0	
02/15/02	1553	11:00	400	730	27	270	10.7	0.0	
02/21/02	1693	8:07	400	705	41	437	71.0	0.0	GAC Changeout
02/27/02	1838	10:30	380	590	68	465	37.0	0.0	
03/06/02	2004	9:00	378	600	68	310	53.2	0.2	GAC Changeout
03/13/02	2173	14:35	375	590	67	259	28.0	0.0	
03/20/02	2334	10:45	400	655	67	220	10.3	0.2	GAC Changeout
03/29/02	2549	10:00	385	605	61	168	16.0	0.1	
04/01/02	2627	16:50	640	630	59	261	47.4	7.5	
04/02/02	2646	11:40	660	680	61	256	59.0	12.7	GAC Changeout
04/04/02	2650	17:00	675	710	54	264	0.0	0.3	
04/05/02	2668	11:25	670	685	61	256	0.8	0.0	
04/06/02	2692	11:57	630	625	57	233	0.2	0.1	
04/07/02	2714	10:56	685	670	61	212	0.3	0.1	
04/08/02	2740	12:47	660	660	61	232	0.6	0.0	
04/09/02	2759	8:45	650	635	65	252	0.3	0.1	
04/10/02	2789	14:30	650	645	57	224	3.9	0.2	
04/11/02	2817	19:35	715	740	41	129	39.0	0.2	
04/12/02	2839	18:37	710	710	57	337	6.1	0.4	
04/17/02	2904	15:20	695	690	57	153	* 4.8	* 3.8	
04/23/02	3049	15:51	665	665	61	184	* 9.4	* 2.8	
05/03/02	3240	12:48	630	665	54	164	* 2.6	* 1.3	GAC Changeout

TABLE 2 - BUILDING 2 SVE SYSTEM FIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

DATE	HOUR	TIME	UNDILUTED FLOW RATE (scfm)	DILUTED FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	DILUTED PID (2) (ppmv)	MID POINT CARBON PID (2) (ppmv)	EFFLUENT CARBON PID (2) (ppmv)	COMMENTS
05/09/02	3391	19:10	645	640	54	158	#* 23.0	* 0.8	
05/16/02	3549	8:43	675	660	61	145	* 20.0	* 2.8	GAC Changeout
05/23/02	3722	16:20	650	620	57	15.4	* 14.0	* 9.9	
05/30/02	3887	14:00	645	610	57	19.1	* 14.0	* 13.0	
06/04/02	4005	12:00	630	620	57	* 14.0	* 19.0	* 7.0	
06/13/02	4215	8:35	655	645	58	* 18.2	* 8.4	* 2.0	GAC Changeout
06/20/02	4384	10:17	650	640	57	* 10.0	* 7.0	* 1.0	
06/27/02	4554	12:34	635	625	57	* 12.8	* 9.2	* 6.5	
07/03/02	4697	11:00	630	625	55	42.8	# 15.1	# 14.2	
07/09/02	4837	14:17	640	620	57	* 5.9	* 0.9	* 0.9	
07/15/02	4985	11:48	585	575	65	* 9.1	* 7.6	* 2.0	GAC Changeout
07/23/02	5158	9:12	625	610	54	* 13.8	* 9.7	* 0.0	
07/30/02	5328	17:25	565	535	67	* 10.0	* 4.8	* 3.4	
08/07/02	5518	15:15	555	550	54	* 13.8	* 10.0	* 2.2	
08/15/02	5710	15:30	605	590	54	* 7.0	* 5.0	* 4.0	
08/20/02	5826	11:28	590	585	59	* 7.2	* 3.2	* 5.0	
08/27/02	5992	9:40	585	585	58	* 5.6	* 3.1	* 2.5	GAC Changeout
09/05/02	6164	10:45	565	565	64	* 2.5	* 0.8	* 0.4	

Notes:

(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus

(2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane, results as Hexane unless otherwise noted

Readings reading not considered representative of actual concentrations due to mositure or vacuum interference

* Measurements taken with Foxboro OVA-128 calibrated to Hexane. Results as Hexane.

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-1A	11/27/2001	13:00	39	20	1,200	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	22	140	Well Opened
	1/10/2002	15:00	NA	1.3	NA	"
	1/18/2002	18:00	39	48	340	"
	1/24/2002	15:10		1.7	NA	"
	1/31/2002	15:48	30	31	200	"
	2/1/2002	10:00	22	23	96	"
	2/6/2002	13:00	16	16	180	"
	2/15/2002	11:00	20	19	98	Well Closed
	3/20/2002	14:00	NA	45	12	"
	3/29/2002	14:20	3.2	9.5	NA	"
	3/30/2002	10:58	1	11	NA	"
	3/31/2002	10:31	0.5	11	NA	"
	4/1/2002	16:50	NA	11	NA	"
	4/2/2002	11:40	NA	11	NA	"
	4/4/2002	17:00	NA	8.4	NA	"
	4/5/2002	11:30	NA	10.5	NA	"
	4/6/2002	12:00	NA	10	NA	"
	4/7/2002	11:00	NA	11	NA	"
	4/8/2002	12:45	NA	10	NA	"
	4/9/2002	8:45	NA	13	NA	"
	4/10/2002	14:30	NA	12	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	NA	8	NA	"
	4/17/2002	15:20	NA	4.5	NA	"
	4/23/2002	15:51	NA	10	NA	"
	5/3/2002	12:48	NA	5	NA	"
	5/9/2002	19:10	NA	11	NA	"
	5/23/2002	16:20	NA	10.5	NA	"
	6/13/2002	8:35	NA	11	NA	"
	6/20/2002	10:17	NA	11	NA	"
	6/27/2002	12:34	NA	10	NA	"
	7/3/2002	11:00	NA	10	NA	"
	7/9/2002	14:17	NA	11	NA	"
	7/15/2002	11:48	NA	12	NA	"
	7/23/2002	9:12	NA	11	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	9	NA	"
	8/20/2002	11:28	NA	8	NA	"
	8/27/2002	9:40	NA	8	NA	"
	9/5/2002	10:45	NA	8	NA	"
2-VEW-1B	11/27/2001	13:00	11	17	9,999	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	29	2,800	Well Opened
	1/10/2002	15:00	NA	1.6	NA	"
	1/18/2002	18:00	NA	2.9	NA	Well Closed
	1/24/2002	15:10	17	48	9,999	"
	1/31/2002	15:48	8	31	9,999	"
	2/1/2002	10:00	10	23	6,500	"
	2/6/2002	13:00	5.3	16	6,800	"
	2/15/2002	11:00	5.5	19	3,980	"
	2/27/2002	10:30	14.2	52	4,230	"
	3/6/2002	9:00	8.5	48	2,790	"
	3/13/2002	14:35	9	50	4,240	"
	3/20/2002	10:45	12	50	1,300	"
	3/29/2002	10:00	10.1	54	1,800	Well Opened
	3/29/2002	14:20	18.1	46	1,350	"
	3/30/2002	10:58	9	48	1,478	"
	3/31/2002	10:31	8.4	48	1,744	"
	4/1/2002	16:50	7.4	49	1,475	"
	4/2/2002	11:40	6.8	51	1,535	"
	4/4/2002	17:00	6.8	47	1,565	"
	4/5/2002	11:30	9.4	49	1,720	"
	4/6/2002	12:00	10.8	49	1,429	"
	4/7/2002	11:00	17	50	1,474	"
	4/8/2002	12:45	9.2	50	1,434	"
	4/9/2002	8:45	6.5	51	1,684	"
	4/10/2002	14:30	6.2	49	1,635	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	9.4	49	NA	"

BOE-C6-0003394

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	4/17/2002	15:20	9	43	1,439	"
	4/23/2002	15:51	9.15	50	NA	"
	5/3/2002	12:48	11	41.5	642	"
	5/9/2002	19:10	8	43	795	"
	5/23/2002	16:20	17.1	48.5	* 25	"
	6/13/2002	8:35	9.6	48	* 48	"
	6/20/2002	10:17	48	7.8	* 50	"
	6/27/2002	12:34	9.2	48	* 49	"
	7/3/2002	11:00	7	47	489	"
	7/9/2002	14:17	10.3	49	410	"
	7/15/2002	11:48	11	54	520	"
	7/23/2002	9:12	10.8	54	444	"
	7/30/2002	13:35	12.3	62	435	"
	8/7/2002	15:15	9.7	59	436	"
	8/15/2002	15:30	9	50	462	"
	8/20/2002	11:28	10.6	60	189	"
	8/27/2002	9:40	11	59	234	"
	9/5/2002	10:45	11.2	64	260	"
2-VEW-2	11/27/2001	13:00	60	25	1,300	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	70	20	740	Well Opened
	1/10/2002	15:00	NA	1.5	NA	Well Closed
	1/18/2002	18:00	NA	3.2	NA	"
	1/24/2002	15:10	NA	2	NA	"
	1/31/2002	15:48	60	31	9,999	Well Opened
	2/1/2002	10:00	29	22	335	"
	2/6/2002	13:00	18	15	260	"
	2/15/2002	11:00	23	19	94	Well Closed
	3/20/2002	14:00	NA	47	18	"
	3/29/2002	14:20	24	19	8	"
	3/30/2002	10:58	24	21	8	Well Opened
	3/31/2002	10:31	24	20	3	"
	4/1/2002	16:50	25	21	4	"
	4/2/2002	11:40	NA	13	NA	Well Closed
	4/4/2002	17:00	NA	9	NA	"
	4/5/2002	11:30	NA	12.5	NA	"
	4/6/2002	12:00	NA	12	NA	"
	4/7/2002	11:00	NA	13	NA	"
	4/8/2002	12:45	NA	12	NA	"
	4/9/2002	8:45	NA	14	NA	"
	4/10/2002	14:30	NA	12	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	NA	8.5	NA	"
	4/17/2002	15:20	NA	4	NA	"
	4/23/2002	15:51	NA	11	NA	"
	5/3/2002	12:48	NA	6	NA	"
	5/9/2002	19:10	NA	11	NA	"
	5/23/2002	16:20	NA	11	NA	"
	6/13/2002	8:35	NA	12	NA	"
	6/20/2002	10:17	NA	12	NA	"
	6/27/2002	12:34	NA	11	NA	"
	7/3/2002	11:00	NA	12	NA	"
	7/9/2002	14:17	NA	12	NA	"
	7/15/2002	11:48	NA	12	NA	"
	7/23/2002	9:12	NA	12	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	10	NA	"
	8/20/2002	11:28	NA	10	NA	"
	8/27/2002	9:40	NA	9	NA	"
	9/5/2002	10:45	NA	9	NA	"
2-VEW-3A	11/27/2001	13:00	20	20	710	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	12	22	160	Well Opened
	1/10/2002	15:00	NA	1.3	NA	"
	1/18/2002	18:00	23	50	560	"
	1/24/2002	15:10	11	49	470	"
	1/31/2002	15:48	17	32	360	"
	2/1/2002	10:00	7	23	250	"
	2/6/2002	13:00	7	17	210	"
	2/15/2002	11:00	6.5	19	85	Well Closed

BOE-C6-0003395

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	3/20/2002	14:00	NA	50	NA	"
	3/29/2002	10:00	94	54	31	Well Opened
	3/29/2002	14:20	1	9	NA	Well Closed
	3/30/2002	10:58	0.6	11	NA	"
	3/31/2002	10:31	0.5	10	NA	"
	4/1/2002	16:50	NA	10	NA	"
	4/2/2002	11:40	NA	12	NA	"
	4/4/2002	17:00	NA	8	NA	"
	4/5/2002	11:30	NA	11.5	NA	"
	4/6/2002	12:00	NA	10.5	NA	"
	4/7/2002	11:00	NA	11	NA	"
	4/8/2002	12:45	NA	12	NA	"
	4/9/2002	8:45	NA	13	NA	"
	4/10/2002	14:30	NA	10	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	NA	8	NA	"
	4/17/2002	15:20	NA	4	NA	"
	4/23/2002	15:51	NA	10	NA	"
	5/3/2002	12:48	NA	5.5	NA	"
	5/9/2002	19:10	NA	10	NA	"
	5/23/2002	16:20	NA	10	NA	"
	6/13/2002	8:35	NA	12	NA	"
	6/20/2002	10:17	NA	12	NA	"
	6/27/2002	12:34	NA	11	NA	"
	7/3/2002	11:00	NA	10	NA	"
	7/9/2002	14:17	NA	11	NA	"
	7/15/2002	11:48	NA	12	NA	"
	7/23/2002	9:12	NA	12	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	8	NA	"
	8/20/2002	11:28	NA	8	NA	"
	8/27/2002	9:40	NA	8	NA	"
	9/5/2002	10:45	NA	8	NA	"
2-VEW-3B	11/27/2001	13:00	11	25.0	2,250	Initial Startup
	11/28/2001	13:15	NA	0.1	NA	Well Closed
	11/30/2001	14:20	NA	0.7	NA	"
	12/3/2001	17:10	NA	0.2	NA	"
	12/4/2001	10:15	NA	0.9	NA	"
	12/5/2001	16:30	NA	0.6	NA	"
	12/6/2001	8:30	NA	0.8	NA	"
	12/7/2001	7:30	NA	1.2	NA	"
	12/8/2001	16:00	NA	0.1	NA	"
	12/9/2001	13:00	NA	0.0	NA	"
	12/10/2001	16:00	NA	0.4	NA	"
	12/11/2001	11:00	NA	1.4	NA	"
	12/12/2001	19:15	8	29.5	1,900	Well Opened
	12/13/2001	11:15	8	29.0	1,675	"
	12/20/2001	15:10	17	39.0	1,345	"
	12/28/2001	11:00	15	23.0	220	"
	1/10/2002	15:00	NA	1.5	NA	Well Closed
	1/18/2002	18:00	NA	3.3	NA	"
	1/24/2002	15:10	NA	3.0	NA	"
	1/31/2002	15:48	7	32.0	390	Well Opened
	2/1/2002	10:00	10	23.0	220	"
	2/6/2002	13:00	7	17.0	230	"
	2/15/2002	11:00	5.7	19	320	"
	3/20/2002	14:00	NA	47	203	"
	3/29/2002	14:20	18	46	296	"
	3/30/2002	10:58	8.4	48	226	"
	3/31/2002	10:31	9	48	231	"
	4/1/2002	16:50	9.3	48	197	"
	4/2/2002	11:40	11.3	52	172	"
	4/4/2002	17:00	10.1	47	262	"
	4/5/2002	11:30	13.8	50	142	"
	4/6/2002	12:00	49	14.1	116	"
	4/7/2002	11:00	15.1	56	105	"
	4/8/2002	12:45	17.1	51	87	"
	4/9/2002	8:45	16.9	52	106	"
	4/10/2002	14:30	19.2	49	88	"
	4/11/2002	19:35	NA	NA	NA	"

BOE-C6-0003396

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	4/12/2002	18:37	19	49	NA	"
	4/17/2002	15:20	23	43	156	"
	4/23/2002	15:51	26.3	50	NA	"
	5/3/2002	12:48	28	42	51	"
	5/9/2002	19:10	24	42	42	"
	5/23/2002	16:20	48	28.6	* 4.8	"
	6/13/2002	8:35	31.5	48	* 7.0	"
	6/20/2002	10:17	28.4	48	* 7.0	"
	6/27/2002	12:34	31.3	48	* 5.2	"
	7/3/2002	11:00	28	47	67	"
	7/9/2002	14:17	31	48	19	"
	7/15/2002	11:48	35	54	80	"
	7/23/2002	9:12	36.8	54	20	"
	7/30/2002	13:35	NA	NA	NA	Well Closed
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	10	NA	"
	8/20/2002	11:28	NA	9	NA	"
	8/27/2002	9:40	NA	8	NA	"
	9/5/2002	10:45	NA	9	NA	"
2-VEW-4	11/27/2001	13:00	30	25	1,250	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	15	450	Well Opened
	1/10/2002	15:00	NA	1.8	NA	"
	1/18/2002	18:00	NA	3.8	NA	"
	1/24/2002	15:10	NA	2.3	NA	"
	1/31/2002	15:48	33	31	940	"
	2/1/2002	10:00	23	23.5	565	"
	2/6/2002	13:00	21	17	680	"
	2/15/2002	11:00	20.5	19	400	Well Closed
	3/20/2002	14:00	NA	41	17	"
	3/29/2002	14:20	59	45	60	Well Opened
	3/30/2002	10:58	51.5	48	167	"
	3/31/2002	10:31	55.5	47	235	"
	4/1/2002	16:50	51.5	48	270	"
	4/2/2002	11:40	56	50	257	"
	4/4/2002	17:00	55	46	276	"
	4/5/2002	11:30	58	48.5	264	"
	4/6/2002	12:00	56	48	232	"
	4/7/2002	11:00	54.5	49.5	223	"
	4/8/2002	12:45	59.5	47	232	"
	4/9/2002	8:45	58	50	272	"
	4/10/2002	14:30	55.5	47	234	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	48	61	NA	"
	4/17/2002	15:20	58.5	41	252	"
	4/23/2002	15:51	61.5	49	NA	"
	5/3/2002	12:48	57	41	209	"
	5/9/2002	19:10	48	43	179	"
	5/23/2002	16:20	56	47	* 17.2	"
	6/13/2002	8:35	58	46	* 13.8	"
	6/20/2002	10:17	54.5	48	* 15.0	"
	6/27/2002	12:34	61.5	47	* 12.2	"
	7/3/2002	11:00	54	46	79	"
	7/9/2002	14:17	59.5	48	64	"
	7/15/2002	11:48	63	52	72	"
	7/23/2002	9:12	70	53	39	"
	7/30/2002	13:35	NA	NA	NA	Well Closed
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	65	50	NA	"
	8/20/2002	11:28	78.5	58	119	"
	8/27/2002	9:40	82	57	37	"
	9/5/2002	10:45	82	57	37	"
2-VEW-5	11/27/2001	13:00	90	25	1,075	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	17	800	Well Opened
	1/10/2002	15:00	NA	2.8	NA	"
	1/18/2002	18:00	NA	3.4	NA	"
	1/24/2002	15:10	NA	2.5	NA	"
	1/31/2002	15:48	65	30	1,150	"
	2/1/2002	10:00	47	20	700	"
	2/6/2002	13:00	32	16	910	"

BOE-C6-0003397

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	2/15/2002	11:00	36	19	570	Well Closed
	3/20/2002	14:00	NA	43	75	"
	3/29/2002	14:20	81	39	76	"
	3/30/2002	10:58	80.5	41	99	Well Opened
	3/31/2002	10:31	80.5	41	102	"
	4/1/2002	16:50	80	41	107	"
	4/2/2002	11:40	86	43	91	"
	4/4/2002	17:00	83.5	38	104	"
	4/5/2002	11:30	86	42	80	"
	4/6/2002	12:00	85	41	69	"
	4/7/2002	11:00	94.5	41.5	63	"
	4/8/2002	12:45	87	40	61	"
	4/9/2002	8:45	87	42	78	"
	4/10/2002	14:30	85.5	40	69	"
	4/11/2002	19:35	NA	NA	NA	Well Closed
	4/12/2002	18:37	NA	11	NA	"
	4/17/2002	15:20	NA	6	NA	"
	4/23/2002	15:51	NA	13.5	NA	"
	5/3/2002	12:48	NA	7	NA	"
	5/9/2002	19:10	NA	14	NA	"
	5/23/2002	16:20	NA	15	NA	"
	6/13/2002	8:35	NA	15	NA	"
	6/20/2002	10:17	NA	15.5	NA	"
	6/27/2002	12:34	NA	14.5	NA	"
	7/3/2002	11:00	NA	15	NA	"
	7/9/2002	14:17	NA	15	NA	"
	7/15/2002	11:48	NA	16	NA	"
	7/23/2002	9:12	NA	12	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	12	NA	"
	8/20/2002	11:28	NA	11	NA	"
	8/27/2002	9:40	NA	12	NA	"
	9/5/2002	10:45	NA	vent	NA	"
2-VEW-6	11/27/2001	13:00	52	25	9,999	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	NA	15	625	Well Opened
	1/10/2002	15:00	NA	2.3	NA	Well Closed
	1/18/2002	18:00	NA	3.6	NA	"
	1/24/2002	15:10	NA	2.5	NA	"
	1/31/2002	15:48	40	30	3,130	Well Opened
	2/1/2002	10:00	27	20	1,500	"
	2/6/2002	13:00	21	16	1,530	"
	2/15/2002	11:00	25	19	945	Well Closed
	2/27/2002	10:30	68	35	520	"
	3/6/2002	9:00	81	33	433	"
	3/13/2002	14:35	81	34	335	"
	3/20/2002	10:45	62	30	280	"
	3/29/2002	10:00	56	28	241	Well Opened
	3/29/2002	14:20	85	46	246	"
	3/30/2002	10:58	78.5	44	263	"
	3/31/2002	10:31	87	42	262	"
	4/1/2002	16:50	81	43	245	"
	4/2/2002	11:40	86	45	208	"
	4/4/2002	17:00	87	40	222	"
	4/5/2002	11:30	98	43	209	"
	4/6/2002	12:00	94.5	42.5	172	"
	4/7/2002	11:00	93.5	43.5	168	"
	4/8/2002	12:45	96.5	43	165	"
	4/9/2002	8:45	95.5	44	208	"
	4/10/2002	14:30	87	42	165	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	104	44	NA	"
	4/17/2002	15:20	107	37	158	"
	4/23/2002	15:51	108	44	NA	"
	5/3/2002	12:48	98	37	110	"
	5/9/2002	19:10	83	39	105	"
	5/23/2002	16:20	88.5	44	8	"
	6/13/2002	8:35	89	45	10	"
	6/20/2002	10:17	84.5	44	8	"
	6/27/2002	12:34	86.5	43	7	"
	7/3/2002	11:00	81	43	40	"

BOE-C6-0003398

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	7/9/2002	14:17	92.5	44	25	"
	7/15/2002	11:48	95	48	55	"
	7/23/2002	9:12	106.5	48	18	"
	7/30/2002	13:35	NA	NA	NA	Well Closed
	8/7/2002	15:15	NA	vent	NA	"
	8/15/2002	15:30	NA	vent	NA	"
	8/20/2002	11:28	NA	vent	NA	"
	8/27/2002	9:40	NA	vent	NA	"
	9/5/2002	10:45	NA	vent	NA	"
2-VEW-7A	11/27/2001	13:00	13	25	360	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	20	100	Well Opened
	1/10/2002	15:00	NA	1.4	NA	"
	1/18/2002	18:00	17	50	600	"
	1/24/2002	15:10	15	48	940	"
	1/31/2002	15:48	8	30	1,100	"
	2/1/2002	10:00	6	21	730	"
	2/6/2002	13:00	16	4.5	775	"
	2/15/2002	11:00	6	18	333	Well Closed
	3/20/2002	14:00	NA	53	17	"
	3/29/2002	14:20	11.6	41	25	Well Opened
	3/30/2002	10:58	12	44	39	"
	3/31/2002	10:31	13.6	43.5	54	"
	4/1/2002	16:50	14.1	43	73	"
	4/2/2002	11:40	13	46	73	"
	4/4/2002	17:00	11.8	41.5	81	"
	4/5/2002	11:30	15.4	45	59	"
	4/6/2002	12:00	14.4	44	51	"
	4/7/2002	11:00	14.4	45	51	"
	4/8/2002	12:45	14.4	45	47	"
	4/9/2002	8:45	13.7	45	55	"
	4/10/2002	14:30	13.3	44	53	"
	4/11/2002	19:35	NA	NA	NA	Well Closed
	4/12/2002	18:37	104	9	NA	"
	4/17/2002	15:20	107	5	NA	"
	4/23/2002	15:51	108	12	NA	"
	5/3/2002	12:48	98	6	NA	"
	5/9/2002	19:10	83	11	NA	"
	5/23/2002	16:20	NA	12	NA	"
	6/13/2002	8:35	NA	13	NA	"
	6/20/2002	10:17	NA	12	NA	"
	6/27/2002	12:34	NA	12	NA	"
	7/3/2002	11:00	NA	12	NA	"
	7/9/2002	14:17	NA	13	NA	"
	7/15/2002	11:48	NA	13	NA	"
	7/23/2002	9:12	NA	11.5	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	9	NA	"
	8/20/2002	11:28	NA	8	NA	"
	8/27/2002	9:40	NA	8	NA	"
	9/5/2002	10:45	NA	8	NA	"
2-VEW-7B	11/27/2001	13:00	60	25.0	600	Initial Startup
	11/28/2001	13:15	NA	0.3	NA	Well Closed
	11/30/2001	14:20	NA	0.9	NA	"
	12/3/2001	17:10	NA	0.2	NA	"
	12/4/2001	10:15	NA	1.2	NA	"
	12/5/2001	16:30	NA	0.8	NA	"
	12/6/2001	8:30	NA	1.0	NA	"
	12/7/2001	7:30	NA	1.4	NA	"
	12/8/2001	16:00	NA	0.1	NA	"
	12/9/2001	13:00	NA	0.0	NA	"
	12/10/2001	16:00	NA	0.5	NA	"
	12/11/2001	11:00	NA	1.6	NA	"
	12/12/2001	19:15	75	27.0	5,450	Well Opened
	12/13/2001	11:15	85	29.0	4,380	"
	12/20/2001	15:10	95	34.0	9,999	"
	12/28/2001	11:00	75	20.0	100	"
	1/3/2002	15:00	75	20.0	100	"
	1/10/2002	15:00	NA	1.9	NA	Well Closed

BOE-C6-0003399

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	1/18/2002	18:00	NA	3.5	NA	"
	1/24/2002	15:10	NA	2.4	NA	"
	1/31/2002	15:48	57	29.0	1,060	Well Opened
	2/1/2002	10:00	40	21.0	920	"
	2/6/2002	13:00	34	17.0	850	"
	2/15/2002	11:00	34	18	850	"
	2/27/2002	10:30	70	36	800	"
	3/6/2002	9:00	65	34	677	"
	3/13/2002	14:35	78	35	495	"
	3/20/2002	10:45	91	35	420	"
	3/29/2002	10:00	64	44	422	"
	3/29/2002	14:20	77.5	40	385	"
	3/30/2002	10:58	58.5	42	406	"
	3/31/2002	10:31	59	41.5	431	"
	4/1/2002	16:50	78	42	375	"
	4/2/2002	11:40	81	44	351	"
	4/4/2002	17:00	85	39.5	421	"
	4/5/2002	11:30	107	42.5	390	"
	4/6/2002	12:00	104	42	323	"
	4/7/2002	11:00	102	43	310	"
	4/8/2002	12:45	101	44	310	"
	4/9/2002	8:45	106	44	352	"
	4/10/2002	14:30	80	42	319	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	114	43	NA	"
	4/17/2002	15:20	114.5	36	305	"
	4/23/2002	15:51	109	44	NA	"
	5/3/2002	12:48	58	36.5	178	"
	5/9/2002	19:10	73	39	164	"
	5/23/2002	16:20	87.5	43	* 11	"
	6/13/2002	8:35	86.5	44	* 9.5	"
	6/20/2002	10:17	39.5	44	* 9.0	"
	6/27/2002	12:34	86.5	43	* 6.5	"
	7/3/2002	11:00	78	42	44	"
	7/9/2002	14:17	107	44	32	"
	7/15/2002	11:48	96	48	47	"
	7/23/2002	9:12	121	48	19	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	128	52	44	"
	8/15/2002	15:30	96	46	NA	"
	8/20/2002	11:28	NA	10	NA	Well Closed
	8/27/2002	9:40	NA	10	NA	"
	9/5/2002	10:45	NA	10	NA	"
2-VEW-8A	11/27/2001	13:00	14	25	1,675	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	10	20	240	Well Opened
	1/10/2002	15:00	NA	2.5	NA	"
	1/18/2002	18:00	24	50	855	"
	1/24/2002	15:10	14	48	1,030	"
	1/31/2002	15:48	6	30	980	"
	2/1/2002	10:00	7	21	1,010	"
	2/6/2002	13:00	6	16	1,400	"
	2/15/2002	11:00	6.5	18	480	Well Closed
	3/20/2002	14:00	NA	55	24	"
	3/29/2002	14:20	7	43	59	Well Opened
	3/30/2002	10:58	7	43	76	"
	3/31/2002	10:31	9.8	43	81	"
	4/1/2002	16:50	9.4	45	79	"
	4/2/2002	11:40	9.5	46	117	"
	4/4/2002	17:00	8.8	42	130	"
	4/5/2002	11:30	11.4	45	78	"
	4/6/2002	12:00	10.8	44.5	63	"
	4/7/2002	11:00	10.4	44	59	"
	4/8/2002	12:45	11	45	58	"
	4/9/2002	8:45	10.1	47	69	"
	4/10/2002	14:30	9.7	44	69	"
	4/11/2002	19:35	NA	NA	NA	Well Closed
	4/12/2002	18:37	NA	11	NA	"
	4/17/2002	15:20	NA	6	NA	"
	4/23/2002	15:51	NA	13	NA	"
	5/3/2002	12:48	NA	1	NA	"
	5/9/2002	19:10	NA	2	NA	"

BOE-C6-0003400

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	5/23/2002	16:20	NA	14	NA	"
	6/13/2002	8:35	NA	15	NA	"
	6/20/2002	10:17	NA	15	NA	"
	6/27/2002	12:34	NA	14	NA	"
	7/3/2002	11:00	NA	15	NA	"
	7/9/2002	14:17	NA	14.5	NA	"
	7/15/2002	11:48	NA	15	NA	"
	7/23/2002	9:12	NA	15	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	12	NA	"
	8/20/2002	11:28	NA	11	NA	"
	8/27/2002	9:40	NA	11	NA	"
	9/5/2002	10:45	NA	11	NA	"
2-VEW-8B	11/27/2001	13:00	56	30	3,750	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	50	20	990	Well Opened
	1/10/2002	15:00	64	21	2,750	"
	1/18/2002	18:00	NA	3.7	NA	Well Closed
	1/24/2002	15:10	NA	2.8	NA	"
	1/31/2002	15:48	46	29	1,300	Well Opened
	2/1/2002	10:00	30	21	1,370	"
	2/6/2002	13:00	22	16	790	"
	2/15/2002	11:00	22	19	1,830	"
	2/27/2002	10:30	76	44	1,185	"
	3/6/2002	9:00	54	42	930	"
	3/13/2002	14:35	90	42	715	"
	3/20/2002	10:45	103	41	510	"
	3/29/2002	10:00	62	44	472	"
	3/29/2002	14:20	60	42	500	"
	3/30/2002	10:58	62.5	44	712	"
	3/31/2002	10:31	60.5	44.5	724	"
	4/1/2002	16:50	60	43	740	"
	4/2/2002	11:40	64	46	664	"
	4/4/2002	17:00	68	41	660	"
	4/5/2002	11:30	64	43.5	704	"
	4/6/2002	12:00	61.5	43.5	668	"
	4/7/2002	11:00	63.5	45.5	681	"
	4/8/2002	12:45	66	44	669	"
	4/9/2002	8:45	65.5	45	787	"
	4/10/2002	14:30	65	43	719	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	41.8	26	NA	"
	4/17/2002	15:20	51.5	19.5	276	"
	4/23/2002	15:51	50.5	28.5	NA	"
	5/3/2002	12:48	31.1	22	281	"
	5/9/2002	19:10	23	21	362	"
	5/23/2002	16:20	38.4	29	* 39	"
	6/13/2002	8:35	25.2	30	* 20	"
	6/20/2002	10:17	40.9	30	* 25	"
	6/27/2002	12:34	28.6	29	* 17	"
	7/3/2002	11:00	18	28	121	"
	7/9/2002	14:17	65	29	83	"
	7/15/2002	11:48	40	30	133	"
	7/23/2002	9:12	51.5	31	117	"
	7/30/2002	13:35	151	55	86	"
	8/7/2002	15:15	121	51	69	"
	8/15/2002	15:30	93	46	NA	"
	8/20/2002	11:28	95	54	53	"
	8/27/2002	9:40	132	53	29	"
	9/5/2002	10:45	157	57	17	"
2-VEW-9	11/27/2001	13:00	38	30	2,550	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	19	390	Well Opened
	1/10/2002	15:00	NA	3.2	NA	Well Closed
	1/18/2002	18:00	NA	4.8	NA	"
	1/24/2002	15:10	NA	4.2	NA	"
	1/31/2002	15:48	24	29	1,970	Well Opened
	2/1/2002	10:00	17	21	1,100	"
	2/6/2002	13:00	14	17	750	"
	2/15/2002	11:00	14	20	795	"

BOE-C6-0003401

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	2/27/2002	10:30	98	60	355	"
	3/6/2002	9:00	94	56	350	"
	3/13/2002	14:35	91	56	305	"
	3/20/2002	10:45	93	58	243	"
	3/29/2002	10:00	77	50	241	"
	3/29/2002	14:20	52.5	44	334	"
	3/30/2002	10:58	51	45	532	"
	3/31/2002	10:31	53	45	1,325	"
	4/1/2002	16:50	52	45	610	"
	4/2/2002	11:40	56	48	542	"
	4/4/2002	17:00	60	44	568	"
	4/5/2002	11:30	57.5	45.5	479	"
	4/6/2002	12:00	57	46	546	"
	4/7/2002	11:00	56	47	506	"
	4/8/2002	12:45	56.5	47	497	"
	4/9/2002	8:45	55	47	472	"
	4/10/2002	14:30	57	46	530	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	49.3	44	NA	"
	4/17/2002	15:20	52.5	38	283	"
	4/23/2002	15:51	47.1	44.5	NA	"
	5/3/2002	12:48	54	34	239	"
	5/9/2002	19:10	43	40	300	"
	5/23/2002	16:20	47.3	44	* 25	"
	6/13/2002	8:35	47.8	46	* 23	"
	6/20/2002	10:17	45.4	47	* 20	"
	6/27/2002	12:34	49.7	45	* 19	"
	7/3/2002	11:00	48	45	112	"
	7/9/2002	14:17	48.6	46	82	"
	7/15/2002	11:48	60	52	116	"
	7/23/2002	9:12	63	91	65	"
	7/30/2002	13:35	83.5	60	36	"
	8/7/2002	15:15	69.5	55	28	"
	8/15/2002	15:30	60	48	NA	"
	8/20/2002	11:28	NA	20	NA	Well Closed
	8/27/2002	9:40	NA	20	NA	"
	9/5/2002	10:45	NA	19	NA	"
2-VEW-10A	11/27/2001	13:00	20	30	1,400	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	22	45	Well Opened
	1/10/2002	15:00	NA	2.3	NA	
	1/18/2002	18:00	33	48	2,750	"
	1/24/2002	15:10	45	45	1,890	"
	1/31/2002	15:48	18	28	1,450	"
	2/1/2002	10:00	13	20	1,350	"
	2/6/2002	13:00	11	17	1,250	Well Closed
	2/15/2002	11:00	12.5	19	1,085	Well Opened
	3/20/2002	14:00	NA	57	38	"
	3/29/2002	14:20	13	22	15	"
	3/30/2002	10:58	13	24	23	"
	3/31/2002	10:31	13	24	30	"
	4/1/2002	16:50	13.6	24	49	"
	4/2/2002	11:40	10	23	60	"
	4/4/2002	17:00	9.8	18	82	"
	4/5/2002	11:30	11.9	21	50	"
	4/6/2002	12:00	10.5	21.5	56	"
	4/7/2002	11:00	10.9	22	57	"
	4/8/2002	12:45	10.9	22	147	"
	4/9/2002	8:45	10.5	21	74	"
	4/10/2002	14:30	12.4	22	65	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	11.8	21	NA	"
	4/17/2002	15:20	11.9	16	68	"
	4/23/2002	15:51	10.5	23.5	NA	"
	5/3/2002	12:48	11.4	16	49	"
	5/9/2002	19:10	NA	12	NA	"
	5/23/2002	16:20	24.8	35	* 6.4	"
	6/13/2002	8:35	26.4	36	* 10	"
	6/20/2002	10:17	24.4	36	* 11	"
	6/27/2002	12:34	27.3	35	* 8.0	"
	7/3/2002	11:00	25	32	59	"
	7/9/2002	14:17	27	36	35	"

BOE-C6-0003402

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	7/15/2002	11:48	32	37	64	"
	7/23/2002	9:12	33	37	23	"
	7/30/2002	13:35	NA	NA	NA	Well Closed
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	12	NA	"
	8/20/2002	11:28	NA	12	NA	"
	8/27/2002	9:40	NA	12	NA	"
	9/5/2002	10:45	NA	12	NA	"
2-VEW-10B	11/27/2001	13:00	45	30	1,620	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	32	18	700	Well Opened
	1/10/2002	15:00	NA	4.2	NA	Well Closed
	1/18/2002	18:00	NA	4.4	NA	"
	1/24/2002	15:10	NA	4	NA	"
	1/31/2002	15:48	26	28	6,000	Well Opened
	2/1/2002	10:00	15	21	3,710	"
	2/6/2002	13:00	11	17	3,000	"
	2/15/2002	11:00	14	19	2,580	"
	2/27/2002	10:30	43	37	1,400	"
	3/6/2002	9:00	39	35	1,080	"
	3/13/2002	14:35	39	32	788	"
	3/20/2002	10:45	49	29	690	"
	3/29/2002	10:00	36	29	488	"
	3/29/2002	14:20	15	25	350	"
	3/30/2002	10:58	15	27	533	"
	3/31/2002	10:31	16	28	670	"
	4/1/2002	16:50	15	28	690	"
	4/2/2002	11:40	11	27	287	"
	4/4/2002	17:00	10.9	21.5	297	"
	4/5/2002	11:30	12.1	26.5	364	"
	4/6/2002	12:00	10.6	26	362	"
	4/7/2002	11:00	12.1	27	324	"
	4/8/2002	12:45	11	28	327	"
	4/9/2002	8:45	11.1	26	383	"
	4/10/2002	14:30	12.6	26	370	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	52.5	26.5	NA	"
	4/17/2002	15:20	65.5	39	780	"
	4/23/2002	15:51	67.5	47	NA	"
	5/3/2002	12:48	74	37	447	"
	5/9/2002	19:10	63	40	345	"
	5/23/2002	16:20	69	44	* 36	"
	6/13/2002	8:35	69.5	45	* 42	"
	6/20/2002	10:17	65	46	* 35	"
	6/27/2002	12:34	70.5	44	* 27	"
	7/3/2002	11:00	65	44	148	"
	7/9/2002	14:17	71	45	133	"
	7/15/2002	11:48	82	50	130	"
	7/23/2002	9:12	84.5	50	85	"
	7/30/2002	13:35	116.5	58	76	"
	8/7/2002	15:15	105	54	76	"
	8/15/2002	15:30	81	48	NA	"
	8/20/2002	11:28	100	57	158	"
	8/27/2002	9:40	102	55	52	"
	9/5/2002	10:45	111	60	46	"
2-VEW-11A	11/27/2001	13:00	27	25	1,700	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	21	110	Well Opened
	1/10/2002	15:00	NA	22	725	"
	1/18/2002	18:00	52	47	620	"
	1/24/2002	15:10	79	43	350	"
	1/31/2002	15:48	39	29	280	"
	2/1/2002	10:00	28	20	175	"
	2/6/2002	13:00	24	16	100	"
	2/15/2002	11:00	27	19	90	Well Closed
	3/20/2002	14:00	NA	46	20	"
	3/29/2002	14:20	24	8	NA	"
	3/30/2002	10:58	1	9	NA	"
	3/31/2002	10:31	0.4	10	NA	"
	4/1/2002	16:50	NA	9	NA	"
	4/2/2002	11:40	NA	10	NA	"

BOE-C6-0003403

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	4/4/2002	17:00	NA	7	NA	"
	4/5/2002	11:30	NA	9	NA	"
	4/6/2002	12:00	NA	9	NA	"
	4/7/2002	11:00	NA	9.5	NA	"
	4/8/2002	12:45	NA	10	NA	"
	4/9/2002	8:45	NA	10	NA	"
	4/10/2002	14:30	NA	10	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	NA	8	NA	"
	4/17/2002	15:20	NA	5	NA	"
	4/23/2002	15:51	NA	9.5	NA	"
	5/3/2002	12:48	NA	4	NA	"
	5/9/2002	19:10	NA	8	NA	"
	5/23/2002	16:20	NA	10	NA	"
	6/13/2002	8:35	NA	10	NA	"
	6/20/2002	10:17	NA	10	NA	"
	6/27/2002	12:34	NA	9	NA	"
	7/3/2002	11:00	NA	10	NA	"
	7/9/2002	14:17	NA	8.5	NA	"
	7/15/2002	11:48	NA	8	NA	"
	7/23/2002	9:12	NA	7	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	8	NA	"
	8/20/2002	11:28	NA	5	NA	"
	8/27/2002	9:40	NA	7	NA	"
	9/5/2002	10:45	NA	8	NA	"
2-VEW-11B	11/27/2001	13:00	19	30.0	1,040	Initial Startup
	11/28/2001	13:15	NA	27.5	3,100	Well Opened
	11/30/2001	14:20	NA	27.0	NA	"
	12/3/2001	17:10	NA	26.5	NA	"
	12/4/2001	10:15	NA	27.5	1,510	"
	12/5/2001	16:30	NA	29.0	3,200	"
	12/6/2001	8:30	NA	28.8	3,015	"
	12/7/2001	7:30	NA	29.0	3,600	"
	12/8/2001	16:00	NA	29.0	3,100	"
	12/9/2001	13:00	NA	27.0	NA	"
	12/10/2001	16:00	NA	28.5	4,700	"
	12/11/2001	11:00	NA	30.0	4,100	Well Closed
	12/12/2001	19:15	NA	2.1	NA	"
	12/13/2001	11:15	NA	0.9	NA	"
	12/20/2001	15:10	NA	1.7	NA	"
	12/28/2001	11:00	15	22.0	520	Well Opened
	1/3/2002	15:00	15	22.0	520	"
	1/10/2002	15:00	NA	4.0	NA	"
	1/18/2002	18:00	NA	4.8	NA	"
	1/24/2002	15:10	NA	4.5	NA	"
	1/31/2002	15:48	12	29.0	850	"
	2/1/2002	10:00	6	21.0	590	"
	2/6/2002	13:00	5	16.0	340	"
	2/15/2002	11:00	5.5	19	415	Well Closed
	3/20/2002	14:00	NA	53	303	"
	3/29/2002	14:20	18	39	586	Well Opened
	3/30/2002	10:58	16	41	531	"
	3/31/2002	10:31	17.5	42	1,651	"
	4/1/2002	16:50	17	41	565	"
	4/2/2002	11:40	17	44	515	"
	4/4/2002	17:00	19.6	38.5	536	"
	4/5/2002	11:30	18.4	42	484	"
	4/6/2002	12:00	18.6	42.5	464	"
	4/7/2002	11:00	16.5	43.5	461	"
	4/8/2002	12:45	18.4	44	474	"
	4/9/2002	8:45	17	43	471	"
	4/10/2002	14:30	17	42	463	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	23.7	47	NA	"
	4/17/2002	15:20	28.4	41	465	"
	4/23/2002	15:51	19.7	47	NA	"
	5/3/2002	12:48	25.3	36.5	NA	"
	5/9/2002	19:10	15	41	383	"
	5/23/2002	16:20	16.6	45	* 41	"

BOE-C6-0003404

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	6/13/2002	8:35	15.7	46	* 35	"
	6/20/2002	10:17	15.3	47	* 29	"
	6/27/2002	12:34	16.7	45	* 28	"
	7/3/2002	11:00	16	45	178	"
	7/9/2002	14:17	16.1	46	129	"
	7/15/2002	11:48	21	52	202	"
	7/23/2002	9:12	23.5	52	97	"
	7/30/2002	13:35	29.5	60	92	"
	8/7/2002	15:15	30	57	87	"
	8/15/2002	15:30	20	49	NA	"
	8/20/2002	11:28	25	60	132	"
	8/27/2002	9:40	27	58	51	"
	9/5/2002	10:45	28	63	59	"
2-VEW-12	11/27/2001	13:00	82	30	2,500	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	75	19	390	Well Opened
	1/10/2002	15:00	NA	3.4	NA	Well Closed
	1/18/2002	18:00	NA	5.5	NA	"
	1/24/2002	15:10	NA	4.8	NA	"
	1/31/2002	15:48	75	28	815	Well Opened
	2/1/2002	10:00	49	20	540	"
	2/6/2002	13:00	39	17	325	"
	2/15/2002	11:00	44	19	350	Well Closed
	3/20/2002	14:00	NA	40	61	"
	3/29/2002	14:20	117	41	67	Well Opened
	3/30/2002	10:58	120	42	92	"
	3/31/2002	10:31	121	43	539	"
	4/1/2002	16:50	121	43	154	"
	4/2/2002	11:40	125	45	145	"
	4/4/2002	17:00	124	41	180	"
	4/5/2002	11:30	124	42.5	108	"
	4/6/2002	12:00	121	43.5	110	"
	4/7/2002	11:00	125	44.5	101	"
	4/8/2002	12:45	120	44	100	"
	4/9/2002	8:45	122	44	88	"
	4/10/2002	14:30	125	43	132	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	122	43	NA	"
	4/17/2002	15:20	117	38	55	"
	4/23/2002	15:51	117	44	NA	"
	5/3/2002	12:48	119	34	36	"
	5/9/2002	19:10	107	37	35	"
	5/23/2002	16:20	113	41.5	* 2.0	"
	6/13/2002	8:35	121	43	* 7.0	"
	6/20/2002	10:17	115	44	* 7.0	"
	6/27/2002	12:34	120	42	* 6.8	"
	7/3/2002	11:00	116	42	35	"
	7/9/2002	14:17	117	46	11	"
	7/15/2002	11:48	NA	15	NA	"
	7/23/2002	9:12	NA	16	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	16	NA	"
	8/20/2002	11:28	NA	15	NA	"
	8/27/2002	9:40	NA	17	NA	"
	9/5/2002	10:45	NA	14	NA	"
2-VEW-13A	11/27/2001	13:00	17	25	1,700	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	10	23	95	Well Opened
	1/10/2002	15:00	12	32	380	"
	1/18/2002	18:00	22	48	375	"
	1/24/2002	15:10	45	44	420	"
	1/31/2002	15:48	23	29	500	"
	2/1/2002	10:00	18	20	390	"
	2/6/2002	13:00	16	17	375	"
	2/15/2002	11:00	15	19	189	"
	3/20/2002	14:00	NA	47	161	"
	3/29/2002	14:20	1	6.5	NA	Well Closed
	3/30/2002	10:58	0.3	7.5	NA	"
	3/31/2002	10:31	0.7	8	NA	"
	4/1/2002	16:50	NA	9	NA	"

BOE-C6-0003405

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	4/2/2002	11:40	NA	10	NA	"
	4/4/2002	17:00	NA	6	NA	"
	4/5/2002	11:30	NA	8	NA	"
	4/6/2002	12:00	NA	8	NA	"
	4/7/2002	11:00	NA	9	NA	"
	4/8/2002	12:45	NA	10	NA	"
	4/9/2002	8:45	NA	10	NA	"
	4/10/2002	14:30	NA	9	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	NA	7	NA	"
	4/17/2002	15:20	NA	4.5	NA	"
	4/23/2002	15:51	NA	10	NA	"
	5/3/2002	12:48	NA	5	NA	"
	5/9/2002	19:10	NA	9	NA	"
	5/23/2002	16:20	NA	11	NA	"
	6/13/2002	8:35	NA	11	NA	"
	6/20/2002	10:17	NA	11	NA	"
	6/27/2002	12:34	NA	9	NA	"
	7/3/2002	11:00	NA	8	NA	"
	7/9/2002	14:17	NA	8	NA	"
	7/15/2002	11:48	NA	7	NA	"
	7/23/2002	9:12	NA	6	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	6	NA	"
	8/20/2002	11:28	NA	6	NA	"
	8/27/2002	9:40	NA	6	NA	"
	9/5/2002	10:45	NA	4	NA	"
2-VEW-13B	11/27/2001	13:00	40	25	1,850	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	35	21	990	Well Opened
	1/10/2002	15:00	NA	5	NA	"
	1/18/2002	18:00	NA	4.7	NA	"
	1/24/2002	15:10	NA	5.1	NA	"
	1/31/2002	15:48	22	29	3,550	"
	2/1/2002	10:00	12	20	2,500	"
	2/6/2002	13:00	12	17	1,900	"
	2/15/2002	11:00	9.6	19	1,590	Well Closed
	3/20/2002	14:00	NA	53	303	"
	3/29/2002	14:20	6	24.5	170	Well Opened
	3/30/2002	10:58	8	26	289	"
	3/31/2002	10:31	5.6	26	327	"
	4/1/2002	16:50	5.8	27	291	"
	4/2/2002	11:40	7.6	30	621	"
	4/4/2002	17:00	10	23	632	"
	4/5/2002	11:30	8.6	28	605	"
	4/6/2002	12:00	8.5	28	626	"
	4/7/2002	11:00	8	28.5	582	"
	4/8/2002	12:45	7.5	29	794	"
	4/9/2002	8:45	8	29	697	"
	4/10/2002	14:30	8.3	26	623	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	31.1	47	NA	"
	4/17/2002	15:20	38.2	40.5	567	"
	4/23/2002	15:51	27.5	47	NA	"
	5/3/2002	12:48	33.5	37.5	388	"
	5/9/2002	19:10	27	41	340	"
	5/23/2002	16:20	32.4	45	* 25	"
	6/13/2002	8:35	38	45.5	* 42	"
	6/20/2002	10:17	38	46.5	* 25	"
	6/27/2002	12:34	44.4	45.5	* 14	"
	7/3/2002	11:00	44	44	85	"
	7/9/2002	14:17	46.6	46	78	"
	7/15/2002	11:48	59	51	76	"
	7/23/2002	9:12	63.5	51	47	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	77.5	56	73	"
	8/15/2002	15:30	61	48	NA	"
	8/20/2002	11:28	72	58	75	"
	8/27/2002	9:40	74	56	28	"
	9/5/2002	10:45	NA	16	NA	Well Closed

BOE-C6-0003406

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-14A	11/27/2001	13:00	18	25	1,300	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	19	23	390	Well Opened
	1/10/2002	15:00	NA	22	700	"
	1/18/2002	18:00	40	48	520	"
	1/24/2002	15:10	75	42	415	"
	1/31/2002	15:48	52	28	140	"
	2/1/2002	10:00	43	20	140	"
	2/6/2002	13:00	44	17	102	"
	2/15/2002	11:00	46	18	50	"
	3/20/2002	14:00	NA	42	58	"
	3/29/2002	14:20	18	44	NA	Well Closed
	3/30/2002	10:58	0.3	6	NA	"
	3/31/2002	10:31	0.1	7	NA	"
	4/1/2002	16:50	NA	7	NA	"
	4/2/2002	11:40	NA	8	NA	"
	4/4/2002	17:00	NA	6.5	NA	"
	4/5/2002	11:30	NA	9	NA	"
	4/6/2002	12:00	NA	9	NA	"
	4/7/2002	11:00	NA	9.5	NA	"
	4/8/2002	12:45	NA	10.5	NA	"
	4/9/2002	8:45	NA	10	NA	"
	4/10/2002	14:30	NA	10	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	20	20	NA	"
	4/17/2002	15:20	33	16	27	"
	4/23/2002	15:51	24	22	NA	"
	5/3/2002	12:48	26.6	14	23	"
	5/9/2002	19:10	NA	8	NA	"
	5/23/2002	16:20	NA	9	NA	"
	6/13/2002	8:35	NA	9	NA	"
	6/20/2002	10:17	NA	9	NA	"
	6/27/2002	12:34	NA	8.5	NA	"
	7/3/2002	11:00	NA	9	NA	"
	7/9/2002	14:17	NA	8.5	NA	"
	7/15/2002	11:48	NA	8	NA	"
	7/23/2002	9:12	NA	7	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	6	NA	"
	8/20/2002	11:28	NA	7	NA	"
	8/27/2002	9:40	NA	6	NA	"
	9/5/2002	10:45	NA	6	NA	"
2-VEW-14B	11/27/2001	13:00	33	25.0	1,750	Initial Startup
	11/28/2001	13:15	NA	27.5	3,000	Well Opened
	11/30/2001	14:20	NA	27.0	NA	"
	12/3/2001	17:10	NA	26.0	NA	"
	12/4/2001	10:15	NA	28.0	960	"
	12/5/2001	16:30	NA	28.0	2,400	"
	12/6/2001	8:30	NA	28.2	2,930	"
	12/7/2001	7:30	NA	29.5	3,875	"
	12/8/2001	16:00	NA	29.0	2,650	"
	12/9/2001	13:00	NA	24.0	NA	"
	12/10/2001	16:00	NA	28.0	4,075	"
	12/11/2001	11:00	NA	30.0	3,850	Well Closed
	12/12/2001	19:15	NA	1.9	NA	"
	12/13/2001	11:15	NA	0.8	NA	"
	12/20/2001	15:10	NA	1.6	NA	"
	12/28/2001	11:00	40	21.0	830	Well Opened
	1/3/2002	15:00	40	21.0	830	"
	1/10/2002	15:00	NA	4.2	NA	"
	1/18/2002	18:00	NA	5.9	NA	"
	1/24/2002	15:10	NA	5.2	NA	"
	1/31/2002	15:48	21	28.0	1,015	"
	2/1/2002	10:00	16	20.0	765	"
	2/6/2002	13:00	NA	17.0	600	"
	2/15/2002	11:00	13	18	520	Well Closed
	3/20/2002	14:00	NA	47	79	"
	3/29/2002	14:20	24.5	27	163	Well Opened
	3/30/2002	10:58	16.7	28.5	94	"
	3/31/2002	10:31	17	29	191	"

BOE-C6-0003407

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	4/1/2002	16:50	16	29	208	"
	4/2/2002	11:40	16	30	190	"
	4/4/2002	17:00	16.4	29.5	240	"
	4/5/2002	11:30	17.3	28.5	206	"
	4/6/2002	12:00	16.9	29	200	"
	4/7/2002	11:00	17.6	29.5	191	"
	4/8/2002	12:45	17.8	30.5	189	"
	4/9/2002	8:45	16.7	29	207	"
	4/10/2002	14:30	17.6	28	210	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	11	26	NA	"
	4/17/2002	15:20	11.3	20	210	"
	4/23/2002	15:51	10.5	28	NA	"
	5/3/2002	12:48	10.9	16	129	"
	5/9/2002	19:10	11	23	58	"
	5/23/2002	16:20	10.8	9	NA	"
	6/13/2002	8:35	11	26	* 5.2	"
	6/20/2002	10:17	10.4	27	*7.0	"
	6/27/2002	12:34	12.2	25.5	* 4.0	"
	7/3/2002	11:00	11	25	32	"
	7/9/2002	14:17	11.5	26	11	"
	7/15/2002	11:48	NA	16	NA	Well Closed
	7/23/2002	9:12	NA	16	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	15	NA	"
	8/20/2002	11:28	NA	16	NA	"
	8/27/2002	9:40	NA	16	NA	"
	9/5/2002	10:45	NA	14	NA	"
2-VEW-15A	11/27/2001	13:00	41	30	1,170	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	23	18	67	Well Opened
	1/10/2002	15:00	NA	1.9	NA	"
	1/18/2002	18:00	61	47	810	"
	1/24/2002	15:10	83	43	585	"
	1/31/2002	15:48	37	28	500	"
	2/1/2002	10:00	27	20	300	"
	2/6/2002	13:00	23	16	290	"
	2/15/2002	11:00	29	18	150	"
	3/29/2002	14:20	1	5	NA	Well Closed
	3/30/2002	10:58	0.5	6	NA	"
	3/31/2002	10:31	4	6	NA	"
	4/1/2002	16:50	NA	7	NA	"
	4/2/2002	11:40	NA	8	NA	"
	4/4/2002	17:00	NA	4	NA	"
	4/5/2002	11:30	NA	6	NA	"
	4/6/2002	12:00	NA	6.5	NA	"
	4/7/2002	11:00	NA	7	NA	"
	4/8/2002	12:45	NA	8	NA	"
	4/9/2002	8:45	NA	8	NA	"
	4/10/2002	14:30	NA	7	NA	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	NA	6	NA	"
	4/17/2002	15:20	NA	3.5	NA	"
	4/23/2002	15:51	NA	7	NA	"
	5/3/2002	12:48	NA	3	NA	"
	5/9/2002	19:10	NA	6	NA	"
	5/23/2002	16:20	NA	7	NA	"
	6/13/2002	8:35	NA	7	NA	"
	6/20/2002	10:17	NA	7	NA	"
	6/27/2002	12:34	NA	7	NA	"
	7/3/2002	11:00	NA	7	NA	"
	7/9/2002	14:17	NA	7	NA	"
	7/15/2002	11:48	NA	7	NA	"
	7/23/2002	9:12	NA	6	NA	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	6	NA	"
	8/20/2002	11:28	NA	7	NA	"
	8/27/2002	9:40	NA	6	NA	"
	9/5/2002	10:45	NA	6	NA	"

BOE-C6-0003408

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
2-VEW-15B	11/27/2001	13:00	22	25	1,120	Well Closed 11/28/01-1/2/02
	1/3/2002	15:00	20	21	575	Well Opened
	1/10/2002	15:00	23	22	2,100	"
	1/18/2002	18:00	61	47	810	"
	1/24/2002	15:10	NA	5.1	NA	"
	1/31/2002	15:48	10	28	1,400	"
	2/1/2002	10:00	7	21	925	"
	2/6/2002	13:00	6	16	765	"
	2/15/2002	11:00	6	18	665	Well Closed
	3/20/2002	14:00	NA	51	113	"
	3/29/2002	14:20	19	39	300	Well Opened
	3/30/2002	10:58	18	41	414	"
	3/31/2002	10:31	18	41	412	"
	4/1/2002	16:50	16	29	208	"
	4/2/2002	11:40	18	44	360	"
	4/4/2002	17:00	18.8	39	385	"
	4/5/2002	11:30	20.5	40.5	315	"
	4/6/2002	12:00	18.5	42	311	"
	4/7/2002	11:00	17.6	43	276	"
	4/8/2002	12:45	20	44	289	"
	4/9/2002	8:45	18.7	44	284	"
	4/10/2002	14:30	18.2	42	277	"
	4/11/2002	19:35	NA	NA	NA	"
	4/12/2002	18:37	18.4	48	NA	"
	4/17/2002	15:20	24.5	41	254	"
	4/23/2002	15:51	18	48	NA	"
	5/3/2002	12:48	20.3	37	148	"
	5/9/2002	19:10	18	40	169	"
	5/23/2002	16:20	18.6	45	* 13	"
	6/13/2002	8:35	21.7	47	* 14	"
	6/20/2002	10:17	19	46	* 18	"
	6/27/2002	12:34	21.2	45	* 11	"
	7/3/2002	11:00	29	45	72	"
	7/9/2002	14:17	26	47	55	"
	7/15/2002	11:48	30	51	81	"
	7/23/2002	9:12	33	51	49	"
	7/30/2002	13:35	NA	NA	NA	"
	8/7/2002	15:15	37.5	56	80	"
	8/15/2002	15:30	30	48	NA	"
	8/20/2002	11:28	36	59	97	"
	8/27/2002	9:40	45	57	34	"
	9/5/2002	10:45	45	61	29	"
2-VEW-16A	5/9/2002	19:10	10	41	13	Well Opened
	5/23/2002	16:20	NA	12.5	NA	Well Closed
	6/13/2002	8:35	NA	16	NA	"
	6/20/2002	10:17	NA	16	NA	"
	6/27/2002	12:34	NA	12	NA	"
	7/3/2002	11:00	NA	12	NA	"
	7/9/2002	14:17	NA	16	NA	"
	7/15/2002	11:48	NA	13	NA	"
	7/23/2002	9:12	NA	12	NA	"
	7/30/2002	13:35	NA	NA	NA	Piping disconnected
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	NA	NA	"
	8/20/2002	11:28	NA	NA	NA	"
	8/27/2002	9:40	NA	NA	NA	"
	9/5/2002	10:45	NA	9	NA	Well Closed
2-VEW-16B	5/9/2002	19:10	45	30	46	Well Opened
	5/23/2002	16:20	51.5	33	* 4.7	"
	6/13/2002	8:35	54	36	* 8.0	"
	6/20/2002	10:17	50	38	* 7.0	"
	6/27/2002	12:34	50	32.5	* 8.2	"
	7/3/2002	11:00	52	32	37	"
	7/9/2002	14:17	47	37	15	"
	7/15/2002	11:48	60	28	49	"
	7/23/2002	9:12	60.5	34	29	"
	7/30/2002	13:35	NA	NA	NA	Piping disconnected
	8/7/2002	15:15	NA	NA	NA	"

BOE-C6-0003409

TABLE 3 - BUILDING 2 SVE SYSTEM WELLFIELD DATA

Site Name: BRC Former C-6 Facility
Location: Torrance, California
System: Building 2 SVE system

WELL ID	DATE	TIME	FLOW RATE (1) (scfm)	VACUUM (inches of H2O)	WELLHEAD PID (2) (ppmv)	COMMENTS
	8/15/2002	15:30	NA	NA	NA	"
	8/20/2002	11:28	NA	NA	NA	"
	8/27/2002	9:40	NA	NA	NA	"
	9/5/2002	10:45	NA	12	NA	Well Closed
2-VEW-17A	5/9/2002	19:10	15	23	2	Well Opened
	5/23/2002	16:20	NA	6	NA	Well Closed
	6/13/2002	8:35	NA	6.5	NA	"
	6/20/2002	10:17	NA	6.5	NA	"
	6/27/2002	12:34	NA	6	NA	"
	7/3/2002	11:00	NA	6	NA	"
	7/9/2002	14:17	NA	6	NA	"
	7/15/2002	11:48	NA	7	NA	"
	7/23/2002	9:12	NA	7	NA	"
	7/30/2002	13:35	NA	NA	NA	Piping disconnected
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	NA	NA	"
	8/20/2002	11:28	NA	NA	NA	"
	8/27/2002	9:40	NA	NA	NA	"
	9/5/2002	10:45	NA	4	NA	Well Closed
2-VEW-17B	5/9/2002	19:10	77	42	9	Well Opened
	5/23/2002	16:20	NA	8	NA	Well Closed
	6/13/2002	8:35	NA	8.5	NA	"
	6/20/2002	10:17	NA	9	NA	"
	6/27/2002	12:34	NA	8	NA	"
	7/3/2002	11:00	NA	8	NA	"
	7/9/2002	14:17	NA	8	NA	"
	7/15/2002	11:48	NA	9	NA	"
	7/23/2002	9:12	NA	10	NA	"
	7/30/2002	13:35	NA	NA	NA	Piping disconnected
	8/7/2002	15:15	NA	NA	NA	"
	8/15/2002	15:30	NA	NA	NA	"
	8/20/2002	11:28	NA	NA	NA	"
	8/27/2002	9:40	NA	NA	NA	"
	9/5/2002	10:45	NA	vent	NA	"
2-VEW-18	8/15/2002	15:30	42	49	NA	Well Opened
	8/20/2002	11:28	21	59	97	"
	8/27/2002	9:40	50.5	58	31	"
	9/5/2002	10:45	58	61	26	"
2-VEW-19	8/15/2002	15:30	42	49	NA	Well Opened
	8/20/2002	11:28	71	59	82	"
	8/27/2002	9:40	77	58	24	"
	9/5/2002	10:45	85	62	32	"
2-VEW-20	8/15/2002	15:30	65	50	NA	Well Opened
	8/20/2002	11:28	74	60	33	"
	8/27/2002	9:40	75	58	11	"
	9/5/2002	10:45	81	61	9	"

Notes:
ppmv: parts per million by volume
scfm: standard cubic foot per minute (acfm corrected for vacuum and temperature)
NA: data was not recorded or available
(1) Direct flow readings taken by hand-held TSI Veloci-calc Plus
(2) Measurements taken with a MiniRae 2000 PID calibrated to 100 ppmv Hexane, results as Hexane.
* Measurements taken with Foxboro OVA-128 calibrated to Hexane. Results as Hexane.

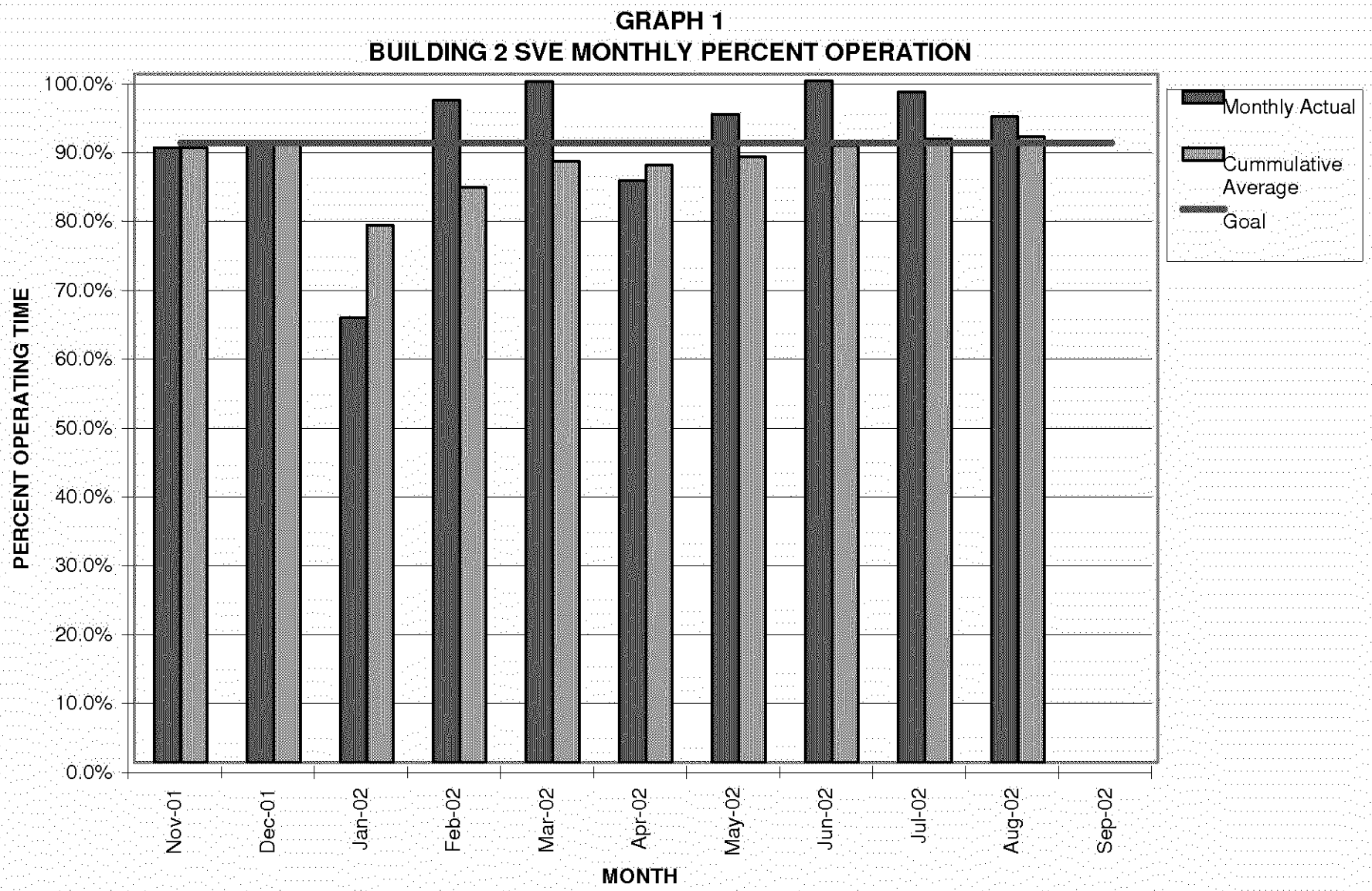
BOE-C6-0003410

TABLE 4 - BUILDING 2 SVE SYSTEM EXTENDED PILOT TEST SOIL SAMPLING RESULTS

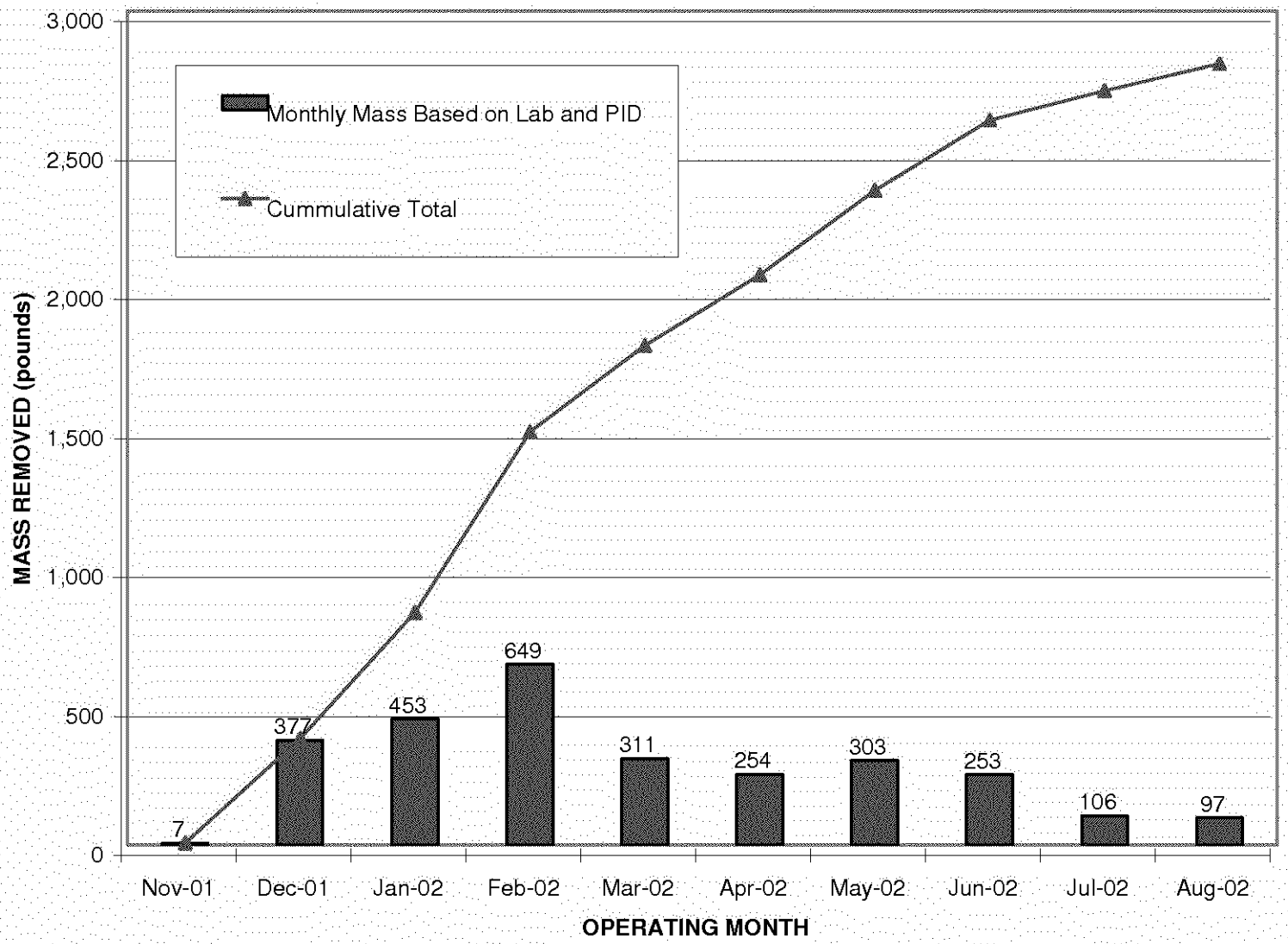
Site Name: BRC Former C-6 Facility
Location: Los Angeles, California
System: Building 2 SVE system

PRE-SVE SOIL BORING	SAMPLE DEPTH (FEET BGS)	PRE-SVE TCE CONCENTRATION (ug/kg)	AUGUST 2002 SOIL BORING	SAMPLE DEPTH (FEET BGS)	AUGUST 2002 TCE CONCENTRATION (ug/kg)	LOCATION OF AUGUST 2002 SAMPLE IN RELATION TO PRE-SVE SAMPLE	APPROXIMATE CONCENTRATION REDUCTION (%)*
C-2-143	25	160	SB1000_SSA080102_0001	25	< 2.0	5 feet west	98.75
C-2-26-1	25	160	2_VEW_19_SSC080102_0001	25	< 2.0	35 feet west	98.75
C-2-26-2	25	37	2_VEW_18_SSC080102_0001	25	< 2.0	25 feet west	94.59
S-24-3	40	220	SB1001_SSB080102_0001	40	380	20 feet northeast	**
C-2-143	50	450	SB1000_SSC080102_0001	50	3.6 J	5 feet west	99.20
C-2-26-1	50	200	2_VEW_19_SSC080102_0001	50	< 2.0	35 feet west	99.00
C-2-26-2	50	130	2_VEW_18_SSC080102_0001	50	< 2.0	25 feet west	98.46
S-24-3	50	450	SB1001_SSC080102_0001	50	7	20 feet north	98.44
S-24-5	50	82,000	SB1001_SSC080102_0002	50	< 2.0	10 feet southeast	100.00

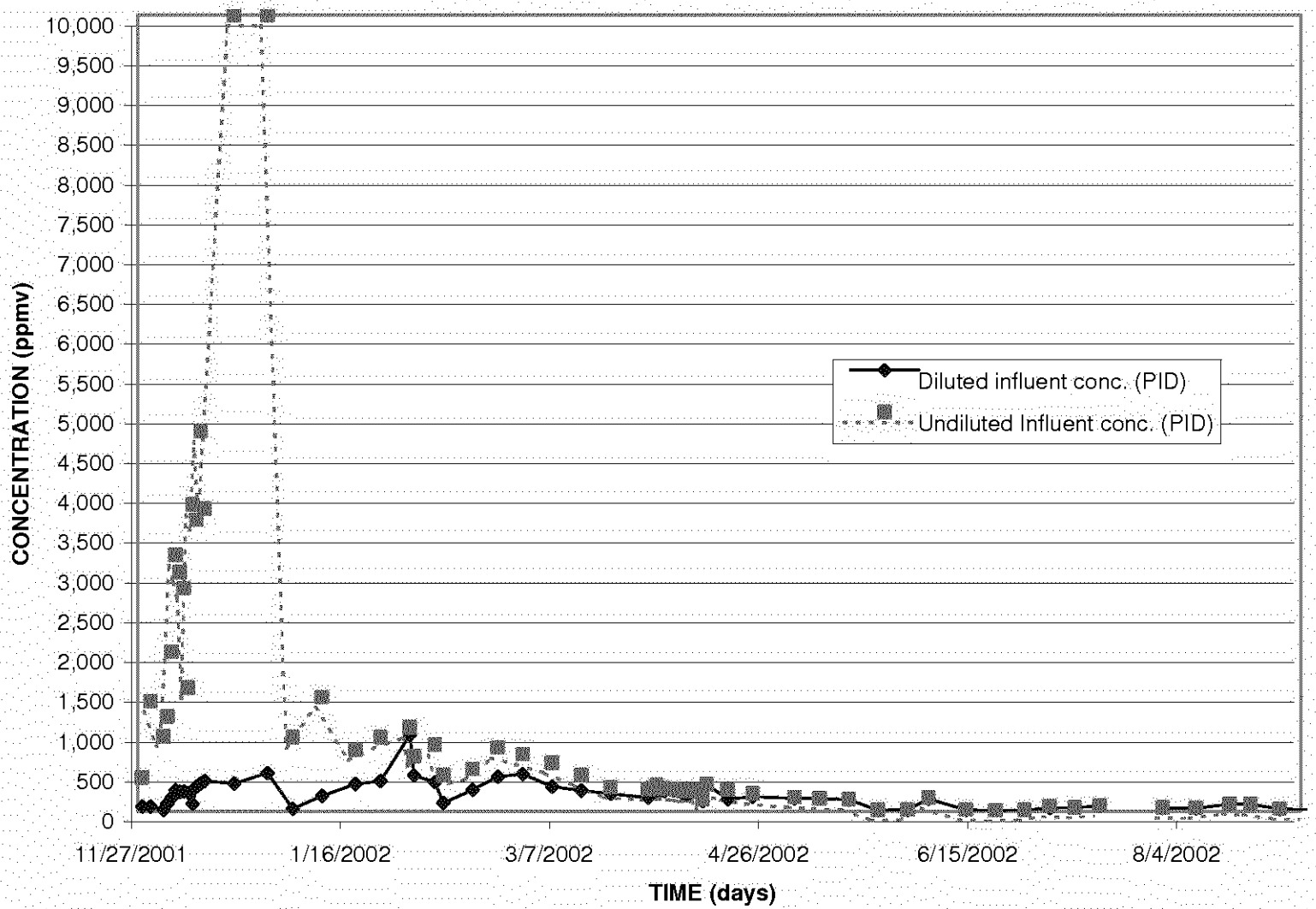
Notes:
J = Result is below laboratory reporting limit, result estimated.
< 2.0 = Not detected above method detection limit of 2.0 ug/kg
* = To calcultae % reduction for samples below method detection limit, the concentration is assumed to be the method detection limit (2.0 ug/kg)
** = August 2002 TCE sample result (SB1001) greater than previous sample (S-24-3) collected 20 feet to the southwest


GRAPH 1
BUILDING 2 SVE MONTHLY PERCENT OPERATION
PERCENT OPERATING TIME
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
Nov-01
Dec-01
Jan-02
Feb-02
Mar-02
Apr-02
May-02
Jun-02
Jul-02
Aug-02
Sep-02
MONTH
Monthly Actual
Cummulative Average
Goal

GRAPH 2
CUMMULATIVE VOLATILE ORGANIC COMPOUND MASS REMOVED



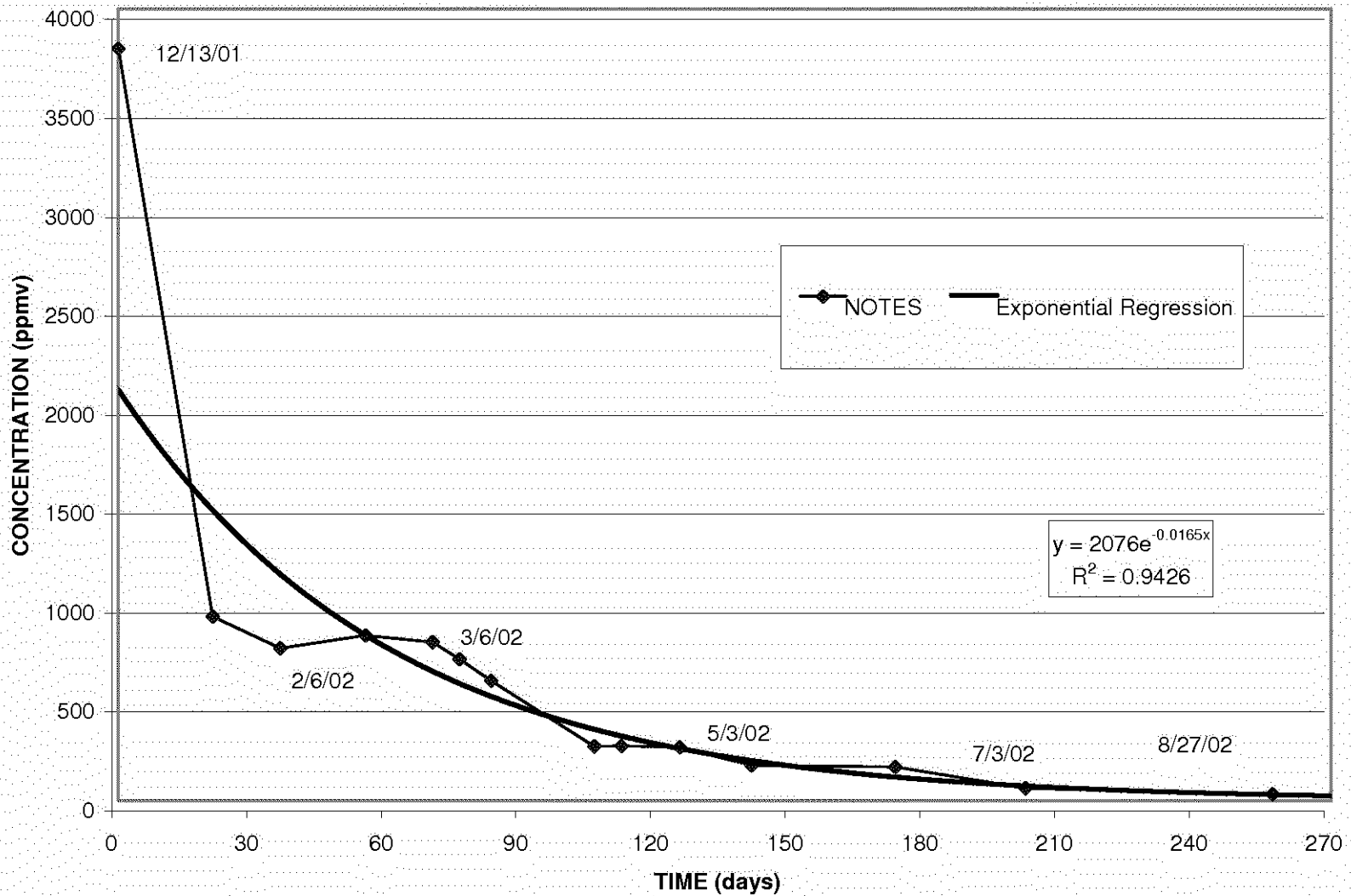
GRAPH 3
BUILDING 2 SVE SYSTEM TOTAL VOC INFLUENT CONCENTRATIONS



Haley & Aldrich, Inc.

9/24/2002

GRAPH 4
BUILDING 2 SVE SYSTEM REGRESSION ANALYSIS
CONCENTRATION REDUCTION



Haley & Aldrich, Inc.

9/27/2002

APPENDIX A

SOIL VAPOR EXTRACTION BORING LOGS

TEST BORING REPORT

Boring No. 2 VEW-1

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 11, 2001
Finish: September 11, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
					13.8	ML	brown SILT (ML), moist					5	95			L	
15							PID = 0.1-0.5 ppm (BZ), ~60 (cutings) ppm										
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary	
Overburden (lin. ft.)	
Rock Cored (lin. ft.)	
Samples	
Boring No.	**2 VEW-1**

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

HALEY & ALDRICH

Boring No. 2 VEW-1
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25					25.0	ML	brown SILT (ML), moist PID = 0.1-0.5 ppm (BZ), >200 (cuttings) ppm					5	95			L	
30																	
35					35.0	SM	brown-yellow fine sand w/ silt (SM), moist PID = 0.5-1.0 (cuttings) ppm					85	15				
40																	
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-1

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-1
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM											
55												20	80				
												10	90				
60																	
					61.3	ML	fine sand grading to silt (ML)										
							PID = 0.1-0.5 ppm (BZ), 35 (cuttings) ppm										
												5	95				
65					65.0		PID = ~180 (cuttings) ppm										
							Total Depth = 65 ft										
							Vapor well Installed 9/11/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-1

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-2

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 12, 2001
Finish: September 12, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
						ML	SILT (ML)										
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-2

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-2
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25					25.0	ML	dark brown SILT (ML), damp, moderate stiffness PID = 0.1 ppm (BZ), ~300 (sample questionable) ppm					5	95			L	
30																	
35																	
					37.5	ML	Loose, brown Silt w/ fine sand (ML), damp PID = 3 (cuttings) ppm					15	85				
40																	
45																	
					46.3	SM	Loose, orange-brown fine sand w/ silt (SM), moist					85	15				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-2

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-2
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM											
					52.5	SM-ML	(SM-ML)grading back into silt PID = 0.1-0.3 ppm (BZ), >300 (sample questionable) ppm										
55																	
60																	
					63.8	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), 0.7 (cuttings) ppm					5	95			L	
65					65.0		Total depth = 65 ft Vapor Well Installed 9/12/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-2

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27980002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-3

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 12, 2001
Finish September 12, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
					11.3	ML	brown Silt w/ trace clay and fine sand (ML), moist					5	95				
							PID = 2-3 ppm (BZ, questionable reading), ~40 (cuttings) ppm										
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-3

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

HALEY & ALDRICH

Boring No. 2 VEW-3
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
					21.3	ML	brown SILT (ML), moist PID = 0.6-0.8 ppm (BZ), ~40 (cuttings) ppm					5	95				
25																	
30																	
					31.3	SM	brown fine sand w/ silt (SM), moist PID = 0.1 ppm (BZ), 56 (cuttings) ppm					80	20				
35																	
40																	
45																	
					46.3	SP	orange-brown fine sand (SP), damp PID = 0.2 ppm (BZ), 30 (cuttings) ppm					95	5				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-3

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

HALEY & ALDRICH

Boring No. 2 VEW-3
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SP											
55																	
60					60.0	SM	brown (SM), moist, grading into silt 55-60 ft PID = 0.2 ppm (BZ), 2.5 (cuttings) ppm					10	90				
					63.0	ML	green-brown (ML), slight fuel odor, moist, silt at bottom of 60-65 ft PID = ~70 (cuttings) ppm					5	95				
65					65.0		Total depth = 65 ft Vapor Well Installed 9/12/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-3

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-4

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 11, 2001
Finish September 11, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
					13.0	ML	SILT (ML)										
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification
O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon
G Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-4

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-4
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25					25.0	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), 8 (cuttings) ppm					5	95			L	
30																	
35					36.3	ML	brown SILT (ML), slight fuel odor from cuttings, moist PID = 0.3 ppm (BZ), 12 (cuttings) ppm					5	95			L	
40																	
45																	
					48.8	SM	fine sand w/ silt (SM)					85	15				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-4

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-4
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM	PID = 5.5 (cuttings) ppm										
55																	
60																	
					61.3	ML	brown SILT (ML), distinct fuel odor, moist PID = 2.4 ppm (BZ, intermittent), >200 (cuttings) ppm					5	95			L	
65					65.0		Total depth = 65 ft Vapor Well Installed 9/11/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-4

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27980002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-5

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 12, 2001
Finish: September 12, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
					18.8	ML	brown SILT (ML), moist					5	95			L	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-5

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVE\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-5
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25																	
					28.8	ML	brown SILT (ML), moist, increase in clay (25-30 ft)						100			L	
30							PID = 0.1 ppm (BZ), 0.5-1 (cuttings) ppm										
35																	
40																	
					41.3	SM	brown-orange fine sand w/ silt (SM), moist					85	15				
							PID = 3.6 (cuttings) ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-5

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-5
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM											
					51.3	SM	brown-orange fine sand w/ silt (SM), moist					90	10				
							PID = 0.1 ppm (BZ), 0.5 (cuttings) ppm										
55																	
60					60.0	ML	brown (ML), moist, grades back into silt					5	95			L	
						ML	SILT (ML)					5	95				
65					65.0		PID = 0.1 ppm (BZ), 0.1 (cuttings) ppm Total depth = 65 ft Vapor Well Installed 9/12/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-5

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-6

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 11, 2001
Finish September 11, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
					12.5	ML	brown SILT (ML), moist					5	95			L	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-6

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-6
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25																	
					28.8	ML	brown SILT (ML), moist					5	95			L	
30							PID = 0.1-0.2 ppm (BZ), 140-160 (cuttings) ppm										
35																	
					38.8	ML	gray-green SILT (ML), distinct fuel odor, moist					5	95				
40							PID = 0.2-0.4 ppm (BZ), 140-220 (cuttings) ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-6

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-6
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50					50.0	SM	gray-green fine sand (SM), distinct fuel odor, moist PID = 0.3-0.6 ppm (BZ), 350-400 (cuttings) ppm					90	10				
55																	
60																	
					63.8	ML	gray-green SILT (ML), distinct fuel odor, moist PID = 0.5-1.0 ppm (BZ), 150-200 (cuttings) ppm					5	95				
65					65.0		Total depth = 65 ft Vapor Well Installed 9/11/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-6

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-7

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 12, 2001
Finish September 12, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-7

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-7
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), 1-2 (cuttings) ppm					5	95			L	
25																	
30																	
					32.5	SM	Loose, orange-brown fine sand w/ silt (SM), moist PID = 10-15 (cuttings) ppm					85	15				
35																	
40																	
					42.5	SM	(SM)					85	15				
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-7

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-7
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM											
					53.8	SM	Loose, orange-brown fine sand w/ silt (SM), moist					85	15				
55							PID = 0.1 ppm (BZ), 0.1 (cuttings) ppm										
60																	
					63.8	ML	brown (ML), moist, grade back into silt 55-60 ft					85	15			L	
65					65.0		Total depth = 65 ft Vapor Well Installed 9/12/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-7

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-8

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 11, 2001
Finish: September 11, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-8

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-8
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	brown SILT (ML), slight fuel odor, damp PID = 0.1 ppm (BZ), 0.5 (cuttings) ppm					5	95			L	
25																	
					28.8	ML	brown SILT (ML), damp PID = 0.1 ppm (BZ), 0.5 (cuttings) ppm					5	95			L	
30																	
35																	
					38.8	SM	brown-yellow fine sand w/ silt (SM), moist PID = 0.1 (BZ & cuttings) ppm					85	15				
40																	
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-8

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-8
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM											
55																	
60					60.0	SM	brown fine sand (SM), moist, grading info silt PID = 0.1 ppm (BZ), ~1.0 (cuttings) ppm					75	25				
65					65.0		Total depth = 65 ft Vapor Well Installed 9/11/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-8

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-9

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 13, 2001
Finish September 14, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-9

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-9
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), 1-3 (cuttings) ppm					5	95			L	
25																	
30					30.0	ML	brown SILT (ML), moist PID = 1-2 (cuttings) ppm					5	95			L	
35																	
40					40.0	SP	brown-yellow fine sand w/ silt (SP), moist PID = 1-2 (cuttings) ppm					85	15				
45					46.3	SP	brown-yellow fine sand (SP), moist PID = 0.1 ppm (BZ), 4-5 (cuttings) ppm					90	10				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-9

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-9
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SP											
					51.3	ML	(ML)silt start to show at 50 ft					10	90				
55																	
60																	
					63.8	ML	Loose, brown SILT (ML), moist					5	95				
							PID = 0.2-0.4 (BZ), 5-6 (cuttings) ppm										
65					65.0		Total depth = 65 ft Vapor Well Installed 9/14/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-9

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-10

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 13, 2001
Finish: September 13, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15					15.0	ML	brown SILT (ML), moist PID = ~2 (cuttings) ppm					5	95			L	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-10

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-10
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25					25.0	ML	Loose, brown SILT (ML), dry PID = 0.2 ppm (BZ), ~2 (cuttings) ppm					5	95				
30																	
35					35.0	ML	Loose, brown SILT (ML), moist PID = 0.5 ppm (BZ), 15-17 (cuttings) ppm					5	95				
40																	
					41.3	SM	Loose, brown-yellow fine sand w/ silt (SM), damp					85	15				
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-10

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6S\VEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-10
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM											
					51.3	SM	fine sand (SM)					90	10				
							PID = 0.3 ppm (BZ), 1-2 (cuttings) ppm										
55																	
					56.3	ML	brown SILT (ML), moist					10	90			L	
							PID = 1-2 ppm (cuttings), 6-12 (sample) ppm										
60																	
						ML	brown SILT (ML), moist, increase in clay					5	95			L	
65					65.0		Total depth = 65 ft Vapor Well Installed 9/13/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-10

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27980002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-11

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 14, 2001
Finish September 14, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-11

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-11
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), ~20 (cuttings) ppm					5	95			L	
25																	
					28.8	ML	brown SILT (ML), moist PID = ~20 (cuttings) ppm					5	95			L	
30																	
35																	
					36.3	SM	brown-yellow fine sand (SM), moist, shell fragments PID = 0.2 ppm (BZ), 2-4 (cuttings) ppm					85	15				
40																	
45					45.0	SM	fine sand (SM)grading into silt 45-50 ft					90	10				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-11

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-11
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50					50.0	ML	Loose, brown SILT (ML), moist PID = 0.1 ppm (BZ), 2-4 (cuttings) ppm					10	90				
55					56.3	ML	(ML)					5	95				
60						ML	gray-brown to gray-green SILT (ML), moist					5	95			L	
65					65.0		Total depth = 65 ft Vapor Well Installed 9/14/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-11

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-12

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 14, 2001
Finish: September 14, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-12

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVE\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-12
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), ~1 (cuttings) ppm					5	95			L	
25																	
					28.8	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), 3-4 (cuttings) ppm					5	95			L	
30																	
35					35.0	SM	brown-yellow fine sand (SM), moist, shell fragments PID = 0.1 ppm (BZ), 1-2 (cuttings) ppm					85	15				
40																	
45												85	15				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-12

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-12
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50																	
					52.5	ML	Loose, brown SILT (ML), moist, grading into silt PID = 4-5 (cuttings) ppm					5	95				
55																	
60																	
					61.3	ML	Loose, gray-brown SILT (ML), moist PID = 0.1 ppm (BZ), 3-5 (cuttings) ppm					5	95				
65					65.0		Total depth = 65 ft Vapor Well Installed 9/14/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-12

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-13

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 13, 2001
Finish: September 13, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
				Drill Mud: None
Hammer Weight (lb.)		140	-	Casing:
Hammer Fall (in.)		30	-	Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15					15.0	ML	Loose, brown SILT with trace of fine sand (ML), damp PID = 15-20 (cuttings) ppm					10	90				
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification		Well Diagram	
O	Open End Rod		Riser Pipe
T	Thin Wall Tube		Screen
U	Undisturbed Sample		Filter Sand
S	Split Spoon		Cuttings
G	Geoprobe		Grout
			Concrete
			Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-13

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-13
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20						ML											
25					25.0	ML	Loose, brown SILT with trace of fine sand (ML), moist PID = 0.1 ppm (BZ), 10-15 (cuttings) ppm					10	90				
30																	
					33.8	SM	Loose, brown-yellow fine sand below 30 ft (SM), moist, some silt present PID = 1.0 (cuttings) ppm					85	15				
35																	
40																	
45					45.0	SP-SM	Loose, brown-yellow fine sand (SP- SM), moist, shell fragments					90	10				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-13

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6S\VEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-13
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SP-SM											
					51.3	ML	brown (ML), moist, begin seeing silt w/ sand around 50 ft PID = 0.1 ppm (BZ), 8-12 (cuttings) ppm					10	90				
55																	
60																	
					63.8	ML	brown SILT (ML), damp, some clay evident 55-60 ft PID = ~2 (cuttings) ppm					5	95			L	
65					65.0		Total depth = 65 ft Vapor Well Installed 9/13/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-13

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\LDG1-36\-002\GINT\27980002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-14

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start September 13, 2001
Finish September 14, 2001
Driller R. Lares
H&A Rep. C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram

- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-14

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6SVEBLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

HALEY & ALDRICH

Boring No. 2 VEW-14
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	Loose, brown SILT (ML), dry PID = 0.1 ppm (BZ), 1-3 (cuttings) ppm					5	95				
25																	
30					30.0	ML	brown SILT (ML), moist PID = 0.1 ppm (BZ), 2-3 (cuttings) ppm					5	95			L	
35																	
					37.5	SM	Loose, brown-yellow fine sand (SM), damp, fine sand starting below 35 ft PID = 2-3 (cuttings) ppm					85	15				
40																	
						SM	(SM)					90	10				
45																	
					48.8	SM	Loose, More brown (SM), moist, fine sand w/ silt and shell fragments					85	15				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-14

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-14
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM	PID = 0.1 ppm (BZ), 1-3 (cuttings) ppm										
55																	
60					60.0	ML	brown SILT (ML), moist, tr. clay					10	90			L	
							PID = 5-7 (cuttings) ppm										
						ML	(ML)					5	95				
65					65.0		Total depth = 65 ft Vapor Well Installed 9/14/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-14

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-15

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: September 13, 2001
Finish: September 13, 2001
Driller: R. Lares
H&A Rep.: C. Brooks
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Lithology based on visual observation of cutting returns at surface. No lithologic samples collected.										
5																	
10																	
15																	
20																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-15

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-15
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0	ML	Loose, brown SILT (ML), dry PID = 0.1 ppm (BZ), 1-2 (cuttings) ppm					5	95				
25																	
30					30.0	ML	Stiff, brown SILT with clay (ML), moist PID = 0.2 ppm (BZ), 6-10 (cuttings) ppm					5	95			L	
35						ML	(ML)					10	90				
40					39.5	SM	Loose, brown-yellow fine sand (SM), moist, fine sand showing in 35-40 ft PID = 2-3 (cuttings) ppm					90	10				
45																	
					48.8	SM	Loose, brown-yellow fine sand (SM), moist, shell fragments					90	10				

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-15

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-15
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50						SM	PID = 0.2 ppm (BZ), 2-3 (cuttings) ppm										
					51.3	ML	(ML)grading into silt ~50 ft					10	90				
55																	
60					60.0	ML	Stiff, brown SILT (ML), moist PID = 3-6 (cuttings) ppm					5	95			L	
						ML	(ML)					5	95				
65					65.0		Total depth = 65 ft Vapor Well Installed 9/13/01										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-15

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-16

Project Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client Boeing Realty Corporation
Contractor West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start May 1, 2002
Finish May 1, 2002
Driller O. Gonzales
H&A Rep. T. Hammond
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0																	
5																	
10																	
					12.0		Dense, Medium brown sandy CLAY with gravel PID = Fill PID ATHA 13 ppm										
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-16

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27980002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-16
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0		Soft, light brown CLAY w/ silt, no odor, moist PID = ATHA 0.0 ppm										
25																	
30					30.0		Hard, light brown silty SAND, moist, hit hard drilling @ 33 ft cuttings PID = ATHA, BG, BZ, 3" = 0.0 ppm										
35																	
40					40.0		Loose, light brown silty SAND, no odor, moist PID = BG, BZ, 3" = 0.0, CAL. check 94.5 ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-16

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6S\VEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-16
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50																	
55																	
60					60.0		Soft, light olive-brown silty Sandy clay/ clayey sand, no odor PID = ATHA 0.0, CAL. check 92.9 ppm										
65					65.0		Total depth = 65 ft Vapor Well Installed 5/1/02										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-16

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-17

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: May 1, 2002
Finish: May 1, 2002
Driller: O. Gonzales
H&A Rep.: T. Hammond
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
				Drill Mud: None
Hammer Weight (lb.)		140	-	Casing:
Hammer Fall (in.)		30	-	Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Cal. check 93.8 ppm.										
5																	
10					10.0		Stiff, Medium brown sandy CLAY, no odor, moist PID = ATHA, BG, BZ, 3" = 0.0 ppm										
15					16.5		CLAY										
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-17

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-17
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20					20.0		Soft, olive brown CLAY with silt and fine sand, no odor, moist PID = ATHA 0.0 ppm										
25					25.0		Hard SANDsandstone fragments in cuttings, hit hard layer PID = BG, BZ, 3" = 0.0 ppm										
30					30.0		light brown silty SAND with clay, no odor, moist, soft with occassional hard gravel sandstone fragments PID = ATHA, BG, BZ, 3" = 0.0 ppm										
35																	
40																	
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-17

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-17
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50					50.0		silty SAND PID = ATHA, BG, BZ, 3" = 0.0 ppm										
55																	
60					60.0		silty SAND, no odorsome clayey chunks in cuttings PID = ATHA, BG, BZ, 3" = 0.0 ppm										
65					65.0		Total depth = 65 ft Vapor Well Installed 5/1/02										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-17

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27960_C-6\SVE\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-18

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: August 1, 2002
Finish: August 1, 2002
Driller: S. Molera
H&A Rep.: T. Hammond
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
				Drill Mud: None
Hammer Weight (lb.)		140	-	Casing:
Hammer Fall (in.)		30	-	Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Drilled to 25 ft, no sampling										
5																	
10																	
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-18

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-18
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20																	
25	17 28 33	A 18"	25.0 26.5		25.0		Soft, light brown sandy SILT, no odor, low moisture, max = medium sand, bedding structure PID = ATHA = 32 ppm										
30																	
35																	
40	14 25 29	B 18"	40.0 41.5		40.0		Soft, light brown silty SAND, no odor, low moisture, max = medium sand, horizontal structure PID = ATHA = 370 ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-18

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-18
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50	15 19 23	C 18"	50.0 51.5		50.0		Stiff, olive brown to light brown sandy SILT with clay, no odor, moist, horizontal structure PID = ATHA = 210 ppm										
55																	
60																	
65					65.0		Total depth = 65 ft Vapor Well Installed 8/1/02										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-18

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27980002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-19

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: August 1, 2002
Finish: August 1, 2002
Driller: D. Worley
H&A Rep.: T. Hammond
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Drilled to 25 ft, no sampling.										
5																	
10																	
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-19

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-19
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20																	
25	17 21 26	A 18"	25.0 26.5		25.0		Stiff, brown sandy SILT with clay, no odor, low moisture, horizontal structure, max = medium sand PID = ATHA = 125 ppm										
30																	
35																	
40	14 18 22	B 18"	40.0 41.5		40.0		Soft, brown to red-brown SAND with silt, no odor, low moisture, bedding structure PID = ATHA = 25 ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-19

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-19
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50	13 16 19	C 18"	50.0 51.5		50.0		Stiff, red-brown silty SAND, no odor, low moisture, bedding structure, rust stains on fractures PID = ATHA = 12 ppm										
55																	
60																	
65					65.0		Total depth = 65 ft Vapor Well Installed 8/1/02										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-19

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-20

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: August 1, 2002
Finish: August 1, 2002
Driller: S. Molera
H&A Rep.: T. Hammond
Elevation
Datum
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							Drilled to 25 ft, no sampling.										
5																	
10																	
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram	
	Riser Pipe
	Screen
	Filter Sand
	Cuttings
	Grout
	Concrete
	Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. 2 VEW-20

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. 2 VEW-20
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20																	
25	14 19 23	A 18"	25.0 26.5		25.0		Soft, light brown silty SAND, no odor, low moisture, horizontal structure, max = medium sand PID = ATHA = 9 ppm										
30																	
35																	
40	17 27 29	B 18"	40.0 41.5		40.0		Soft, light brown fine sand w/ silt, no odor, moist, bedding structure, max = medium sand PID = ATHA = 80 ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-20

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. 2 VEW-20
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50	24 30 32	C 18"	50.0 51.5		50.0		olive to olive brown silty fine sand, no odor, low moisture, bedding structure, rust stains along fractures, some cementing PID = ATHA = 35 ppm										
55																	
60																	
65					65.0		Total depth = 65 ft Vapor Well Installed 8/1/02										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. 2 VEW-20

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. SB-1000

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: August 1, 2002
Finish: August 1, 2002
Driller: D. Worley
H&A Rep.: T. Hammond
Elevation
Datum
Location: 5' southwest of 2-VEW-15

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HSA	S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				NO WELL INSTALLED			Drilled to 25 ft with no sampling.										
5																	
10																	
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification:
- O Open End Rod
- T Thin Wall Tube
- U Undisturbed Sample
- S Split Spoon
- G Geoprobe

Well Diagram:
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples

Boring No. SB-1000

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. SB-1000
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20																	
25	18 22 26	A 18	25.0 26.5		25.0		Hard, olive-brown CLAY w/ silt, no odor, low moisture, occasional fine sand, blocky structure PID = ATHA = 270 ppm										
30																	
35																	
40	13 17 25	B	40.0 41.5		40.0		Soft, light-brown to yellow-brown silty SAND w/ trace clay, no odor, low moisture, horizontal structure PID = ATHA = 150 ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. SB-1000

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. SB-1000
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50	14 17 20	C	50.0 51.5		50.0		Stiff, light-brown to red-gray CLAY with silt, no odor, moist, max size = silt, horizontal structure, fractures, rust staining										
							PID = ATHA = 260 ppm										
					51.5		Bottom of exploration 51.5 ft. Backfilled with 2.5 drums grout (50 gal drums) to 1 ft bgs, used 4.5 bags grout well & 1 bag chips.										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. SB-1000

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

TEST BORING REPORT

Boring No. SB-1001

Project: Former Boeing C-6, Parcel C, Building 2 SVE Torrance, CA
Client: Boeing Realty Corporation
Contractor: West Hazmat Drilling

File No. 28997-005
Sheet No. 1 of 3
Start: August 1, 2002
Finish: August 1, 2002
Driller: S. Molera
H&A Rep.: T. Hammond
Elevation
Datum
Location: 5' west of 2-VEW-6

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HSA	S		Rig Make & Model: Truck
Inside Diameter (in.)		1 3/8		Bit Type: Cutting Head
Hammer Weight (lb.)		140	-	Drill Mud: None
Hammer Fall (in.)		30	-	Casing:
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				NO WELL INSTALLED			Drilled to 30 ft with no sampling.										
5																	
10																	
15																	
20																	

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water

Sample Identification	
O	Open End Rod
T	Thin Wall Tube
U	Undisturbed Sample
S	Split Spoon
G	Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (lin. ft.)
Rock Cored (lin. ft.)
Samples
Boring No. SB-1001

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None; Toughness: L-Low, M-Medium, H-High; Plasticity: N-Nonplastic, L-Low, M-Medium, H-High; Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVE\BLDG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. SB-1001
File No. 28997-005
Sheet No. 2 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20																	
25																	
30	16 24 28	A	30.0 31.5		30.0		Stiff, brown to light brown clayey SILT w/ sand, no odor, moist, horizontal structure PID = ATHA = 140 ppm										
35																	
40	28 32 35	B	40.0 41.5		40.0		Very Stiff, light brown to olive brown silty SAND, strong petroleum odor, moist, bedding structure PID = ATHA = 160 ppm										
45																	

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. SB-1001

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6SVEB\DG1-36\-002\GINT\27960002B.GPJ Sep 27 02

TEST BORING REPORT

Boring No. SB-1001
File No. 28997-005
Sheet No. 3 of 3

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
50																	
	16 22 26	C	50.0 51.5		50.0		Loose, brown to tan silty SAND w/ gravel, petroleum odor, low moisture PID = ATHA = 45 ppm										
					51.5		Bottom of exploration 51.5 ft Backfilled with bentonite grout.										

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. SB-1001

USCS_TB3A_PID_CENTER USCSLIB4.GLB USCSTBC3.GDT G:\PROJECTS\ENVIRONMENTAL\27980_C-6\SVEB\LDG1-36\-002\GINT\27960002B.GPJ Sep 27, 02

APPENDIX B

TABULATED RADIUS OF INFLUENCE CALCULATIONS

TABLE 1
RADIUS OF INFLUENCE, VACUUM
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

Date	2-VEW-1A	2-VEW-1B	2-VEW-2	2-VEW-3A	2-VEW-3B	2-VEW-4	2-VEW-5	2-VEW-6	2-VEW-7A	2-VEW-7B	2-VEW-8A	2-VEW-8B
11/28/2001	0.11	0.15	0.2	0.08	0.13	0.22	0.62	0.32	0.16	0.28	0.4	0.88
11/30/2001	0.6	0.8	0.76	0.6	0.7	0.82	1.2	0.9	0.6	0.9	1	1.5
12/3/2001	0.2	0.28	0.17	0.12	0.18	0.18	0.1	0.17	0.1	0.18	1	0.05
12/4/2001	0.76	1.1	0.92	0.82	0.92	1	1.5	1.1	0.72	1.2	1.2	1.7
12/5/2001	0.54	0.72	0.66	0.54	0.63	0.72	1.1	0.84	0.52	0.8	1	1.4
12/6/2001	0.68	0.94	0.82	0.68	0.8	0.88	1.3	1	0.63	1	1.1	1.6
12/7/2001	1	1.25	1.15	1	1.2	1.3	1.65	1.45	0.92	1.35	1.4	1.95
12/8/2001	0.04	0.04	0.12	0.03	0.05	0.13	0.52	0.2	0.08	0.14	0.28	0.72
12/9/2001	0	0	0	0	0	0	0	0	0	0	0	0
12/10/2001	0.37	0.4	0.47	0.35	0.4	0.49	0.82	0.56	0.31	0.5	0.64	1.1
12/11/2001	1.2	1.6	1.3	1.2	1.4	1.5	1.9	1.6	1.1	1.6	1.7	2.3

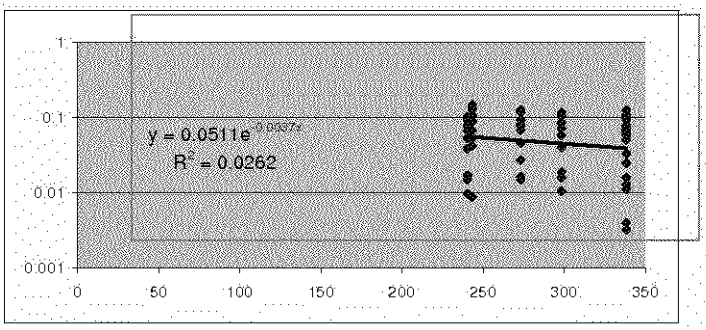
Date	2-VEW-9	2-VEW-10A	2-VEW-10B	2-VEW-11A	2-VEW-11B	2-VEW-12	2-VEW-13A	2-VEW-13B	2-VEW-14A	2-VEW-14B	2-VEW-15A	2-VEW-15B
11/28/2001	4.2	1.2	4.5	1.3	27.5	4.3	1.1	5.2	2.2	27.5	1	5.5
11/30/2001	3.8	1.4	4.4	1.8	27	4.4	1.3	5.5	2.5	27	1.2	5.7
12/3/2001	2.6	0.34	2.4	0.62	26.5	2.9	0.38	3.6	1.3	26	0.34	3.5
12/4/2001	5	2	5.2	2.2	27.5	5	2	6.2	3.1	28	1.7	6.5
12/5/2001	4.8	1.7	5	1.9	29	4.9	1.6	5.9	2.7	28	1.4	6
12/6/2001	5	1.9	5	2.1	28.8	5	1.52	6.4	3	28.2	1.56	6.5
12/7/2001	5.1	2.2	5.3	2.4	29	5	1.6	6.5	3.4	29.5	1.8	6.8
12/8/2001	4	1	4.2	1.4	29	4.2	0.65	5.3	2.1	29	0.9	5.5
12/9/2001	3.5	0.38	3.5	0.8	27	3.5	0.25	4.8	1.7	24	0.5	4.9
12/10/2001	4	1.4	4.5	1.6	28.5	4.4	0.55	5.2	2.4	28	1.1	5.7
12/11/2001	5.5	2.6	5.9	2.7	30	5.4	0.81	7	3.8	30	2.2	6.3

NOTES

All vaccum units are expressed as inches of water (inches H_2O)

TABLE 2
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 11B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

Well	Distance from 11B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
1B	305	27.5	0.15	0.005454545
1B	305	27	0.8	0.02962963
1B	305	26.5	0.28	0.010566038
1B	305	27.5	1.1	0.04
1B	305	29	0.72	0.024827586
1B	305	28.8	0.94	0.032638889
1B	305	29	1.25	0.043103448
1B	305	29	0.04	0.00137931
1B				
1B	305	28.5	0.4	0.014035088
1B	305	30	1.6	0.053333333
2	207	27.5	0.2	0.007272727
2	207	27	0.76	0.028148148
2	207	26.5	0.17	0.006415094
2	207	27.5	0.92	0.033454545
2	207	29	0.66	0.022758621
2	207	28.8	0.82	0.028472222
2	207	29	1.15	0.039655172
2	207	29	0.12	0.004137931
2				
2	207	28.5	0.47	0.016491228
2	207	30	1.3	0.043333333
3B	305	27.5	0.13	0.004727273
3B	305	27	0.7	0.025925926
3B	305	26.5	0.18	0.006792453
3B	305	27.5	0.92	0.033454545
3B	305	29	0.63	0.021724138
3B	305	28.8	0.8	0.027777778
3B	305	29	1.2	0.04137931
3B	305	29	0.05	0.001724138
3B				
3B	305	28.5	0.4	0.014035088
3B	305	30	1.4	0.046666667
4	265	27.5	0.22	0.008
4	265	27	0.82	0.03037037
4	265	26.5	0.18	0.006792453
4	265	27.5	1	0.036363636
4	265	29	0.72	0.024827586
4	265	28.8	0.88	0.030555556
4	265	29	1.3	0.044827586
4	265	29	0.13	0.004482759
4				
4	265	28.5	0.49	0.017192982
4	265	30	1.5	0.05
5	210	27.5	0.62	0.022545455
5	210	27	1.2	0.044444444
5	210	26.5	0.1	0.003773585
5	210	27.5	1.5	0.054545455
5	210	29	1.1	0.037931034
5	210	28.8	1.3	0.045138889
5	210	29	1.65	0.056896552
5	210	29	0.52	0.017931034
5				
5	210	28.5	0.82	0.02877193
5	210	30	1.9	0.063333333
6	240	27.5	0.32	0.011636364
6	240	27	0.9	0.033333333
6	240	26.5	0.17	0.006415094
6	240	27.5	1.1	0.04
6	240	29	0.84	0.028965517
6	240	28.8	1	0.034722222
6	240	29	1.45	0.05
6	240	29	0.2	0.006896552
6				
6	240	28.5	0.56	0.019649123
6	240	30	1.6	0.053333333

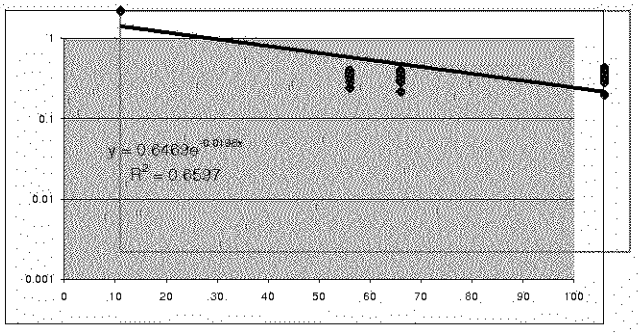


Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
1.00%	**312**
10.00%	**141.4**

Well	Distance from 11B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
7B	260	27.5	0.28	0.010181818
7B	260	27	0.9	0.033333333
7B	260	26.5	0.18	0.006792453
7B	260	27.5	1.2	0.043636364
7B	260	29	0.8	0.027586207
7B	260	28.8	1	0.034722222
7B	260	29	1.35	0.046551724
7B	260	29	0.14	0.004827586
7B				
7B	260	28.5	0.5	0.01754386
7B	260	30	1.6	0.053333333
8B	210	27.5	0.88	0.032
8B	210	27	1.5	0.055555556
8B	210	26.5	0.05	0.001886792
8B	210	27.5	1.7	0.061818182
8B	210	29	1.4	0.048275862
8B	210	28.8	1.6	0.055555556
8B	210	29	1.95	0.067241379
8B	210	29	0.72	0.024827586
8B				
8B	210	28.5	1.1	0.038596491
8B	210	30	2.3	0.076666667
11B	0	27.5	27.5	1
11B	0	27	27	1
11B	0	26.5	26.5	1
11B	0	27.5	27.5	1
11B	0	29	29	1
11B	0	28.8	28.8	1
11B	0	29	29	1
11B	0	29	29	1
11B	0			
11B	0	28.5	28.5	1
11B	0	30	30	1

TABLE 2
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 11B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

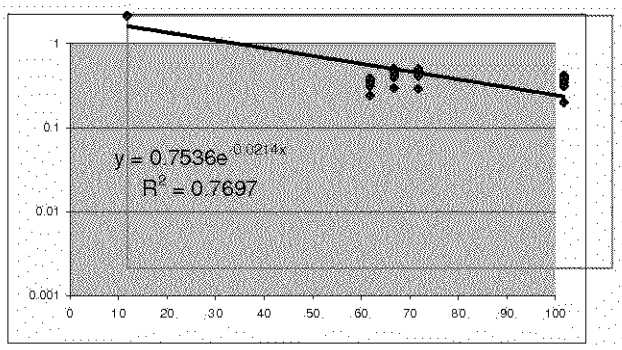
Well	Distance from 11B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
9	55	27.5	4.2	0.152727273
9	55	27	3.8	0.140740741
9	55	26.5	2.6	0.098113208
9	55	27.5	5	0.181818182
9	55	29	4.8	0.165517241
9	55	28.8	5	0.173611111
9	55	29	5.1	0.175862069
9	55	29	4	0.137931034
9	55	27	3.5	0.12962963
9	55	28.5	4	0.140350877
9	55	30	5.5	0.183333333
10B	95	27.5	4.5	0.163636364
10B	95	27	4.4	0.162962963
10B	95	26.5	2.4	0.090566038
10B	95	27.5	5.2	0.189090909
10B	95	29	5	0.172413793
10B	95	28.8	5	0.173611111
10B	95	29	5.3	0.182758621
10B	95	29	4.2	0.144827586
10B	95	27	3.5	0.12962963
10B	95	28.5	4.5	0.157894737
10B	95	30	5.9	0.196666667
12	45	27.5	4.3	0.156363636
12	45	27	4.4	0.162962963
12	45	26.5	2.9	0.109433962
12	45	27.5	5	0.181818182
12	45	29	4.9	0.168965517
12	45	28.8	5	0.173611111
12	45	29	5	0.172413793
12	45	29	4.2	0.144827586
12	45	27	3.5	0.12962963
12	45	28.5	4.4	0.154385965
12	45	30	5.4	0.18
11B	0	27.5	27.5	1
11B	0	27	27	1
11B	0	26.5	26.5	1
11B	0	27.5	27.5	1
11B	0	29	29	1
11B	0	28.8	28.8	1
11B	0	29	29	1
11B	0	29	29	1
11B	0	27	27	1
11B	0	28.5	28.5	1
11B	0	30	30	1



Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
1.00%	**210.5**
10.00%	**94.3**

TABLE 3
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 14B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

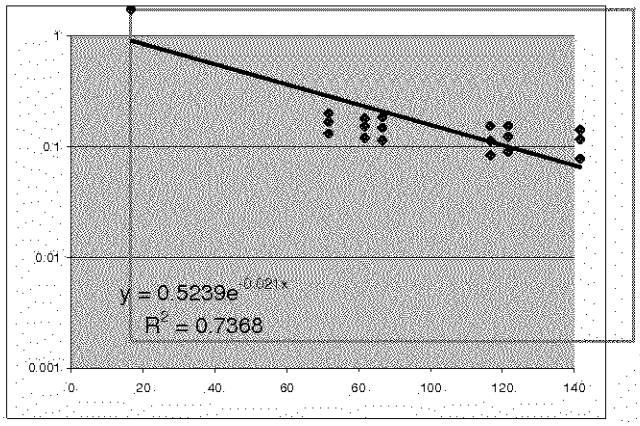
Well	Distance from 14B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
13B	55	27.5	5.2	0.189090909
13B	55	27	5.5	0.203703704
13B	55	26	3.6	0.138461538
13B	55	28	6.2	0.221428571
13B	55	28	5.9	0.210714286
13B	55	28.2	6.4	0.226950355
13B	55	29.5	6.5	0.220338983
13B	55	29	5.3	0.182758621
13B	55	24	4.8	0.2
13B	55	28	5.2	0.185714286
13B	55	30	7	0.233333333
15B	60	27.5	5.5	0.2
15B	60	27	5.7	0.211111111
15B	60	26	3.5	0.134615385
15B	60	28	6.5	0.232142857
15B	60	28	6	0.214285714
15B	60	28.2	6.5	0.230496454
15B	60	29.5	6.8	0.230508475
15B	60	29	5.5	0.189655172
15B	60	24	4.9	0.204166667
15B	60	28	5.7	0.203571429
15B	60	30	6.3	0.21
12	50	27.5	4.3	0.156363636
12	50	27	4.4	0.162962963
12	50	26	2.9	0.111538462
12	50	28	5	0.178571429
12	50	28	4.9	0.175
12	50	28.2	5	0.177304965
12	50	29.5	5	0.169491525
12	50	29	4.2	0.144827586
12	50	24	3.5	0.145833333
12	50	28	4.4	0.157142857
12	50	30	5.4	0.18
10B	90	27.5	4.5	0.163636364
10B	90	27	4.4	0.162962963
10B	90	26	2.4	0.092307692
10B	90	28	5.2	0.185714286
10B	90	28	5	0.178571429
10B	90	28.2	5	0.177304965
10B	90	29.5	5.3	0.179661017
10B	90	29	4.2	0.144827586
10B	90	24	3.5	0.145833333
10B	90	28	4.5	0.160714286
10B	90	30	5.9	0.196666667
14B	0	27.5	27.5	1
14B	0	27	27	1
14B	0	26	26	1
14B	0	28	28	1
14B	0	28	28	1
14B	0	28.2	28.2	1
14B	0	29.5	29.5	1
14B	0	29	29	1
14B	0	24	24	1
14B	0	28	28	1
14B	0	30	30	1



Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
1.00%	**202**
10.00%	**94.4**

TABLE 4
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 7B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

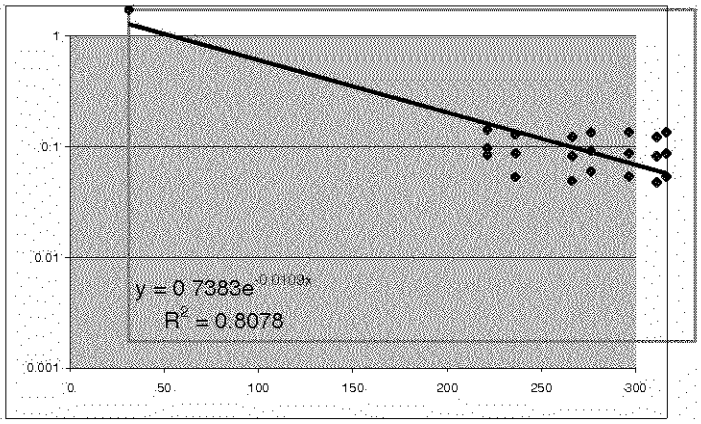
Well	Distance from 7B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
1B	100	27	2.4	0.088888889
1B	100	29	1.4	0.048275862
1B	100	34	2.2	0.064705882
2	125	27	2.2	0.081481481
2	125	29	1.3	0.044827586
2	125	34	2.3	0.067647059
4	65	27	2.8	0.103703704
4	65	29	2	0.068965517
4	65	34	3	0.088235294
5	105	27	2.4	0.088888889
5	105	29	1.5	0.051724138
5	105	34	2.4	0.070588235
6	55	27	3.1	0.114814815
6	55	29	2.2	0.075862069
6	55	34	3.3	0.097058824
7B	0	27	27	1
7B	0	29	29	1
7B	0	34	34	1
8B	70	27	2.9	0.107407407
8B	70	29	1.9	0.065517241
8B	70	34	2.9	0.085294118



Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
10.00%	**79**
1.00%	**189**

TABLE 4
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 7B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

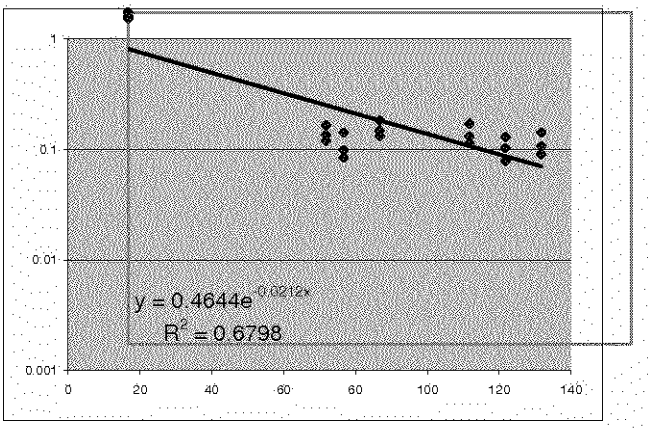
Well	Distance from 7B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
9	205	27	2	0.074074074
9	205	29	0.89	0.030689655
9	205	34	1.7	0.05
10B	190	27	2.2	0.081481481
10B	190	29	1.4	0.048275862
10B	190	34	1.9	0.055882353
11B	265	27	2.1	0.077777778
11B	265	29	0.9	0.031034483
11B	265	34	1.7	0.05
12	235	27	1.9	0.07037037
12	235	29	0.82	0.028275862
12	235	34	1.6	0.047058824
13B	245	27	2.1	0.077777778
13B	245	29	1	0.034482759
13B	245	34	1.8	0.052941176
7B	0	27	27	1
7B	0	29	29	1
7B	0	34	34	1
14B	280	27	1.9	0.07037037
14B	280	29	0.8	0.027586207
14B	280	34	1.6	0.047058824
15B	285	27	2.1	0.077777778
15B	285	29	0.9	0.031034483
15B	285	34	1.7	0.05



Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
1.00%	**395**
10.00%	**183**

TABLE 5
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 3B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

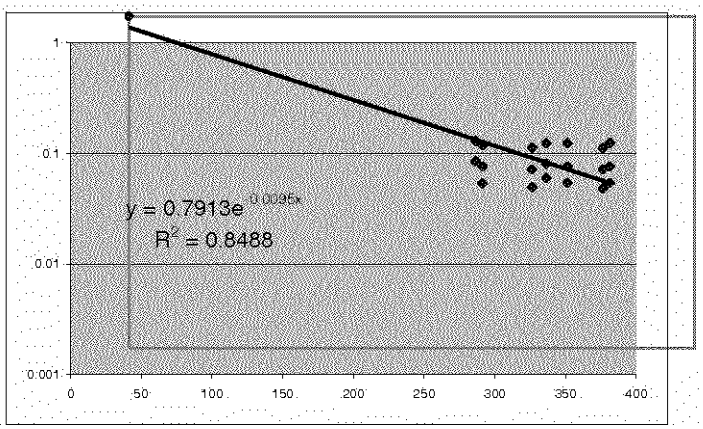
Well	Distance from 3B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
1B	60	29.5	2.4	0.081355932
1B	60	29	1.4	0.048275862
1B	60	39	2.2	0.056410256
2	105	29.5	2.2	0.074576271
2	105	29	1.3	0.044827586
2	105	39	2.3	0.058974359
4	55	29.5	2.8	0.094915254
4	55	29	2	0.068965517
4	55	39	3	0.076923077
5	115	29.5	2.4	0.081355932
5	115	29	1.5	0.051724138
5	115	39	2.4	0.061538462
6	70	29.5	3.1	0.105084746
6	70	29	2.2	0.075862069
6	70	39	3.3	0.084615385
3B	0	29.5	27	0.915254237
3B	0	29	29	1
3B	0	39	34	0.871794872
8B	95	29.5	2.9	0.098305085
8B	95	29	1.9	0.065517241
8B	95	39	2.9	0.074358974



Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
10.00%	**72**
1.00%	**181**

TABLE 5
NORMALIZED RADIUS OF INFLUENCE DATA, WELL 3B
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

Well	Distance from 3B (feet)	Extraction well vacuum (inches H_2O)	Monitoring Point Vacuum (inches H_2O)	Normalized Vacuum
9	250	29.5	2	0.06779661
9	250	29	0.89	0.030689655
9	250	39	1.7	0.043589744
10B	245	29.5	2.2	0.074576271
10B	245	29	1.4	0.048275862
10B	245	39	1.9	0.048717949
11B	310	29.5	2.1	0.071186441
11B	310	29	0.9	0.031034483
11B	310	39	1.7	0.043589744
12	285	29.5	1.9	0.06440678
12	285	29	0.82	0.028275862
12	285	39	1.6	0.041025641
13B	295	29.5	2.1	0.071186441
13B	295	29	1	0.034482759
13B	295	39	1.8	0.046153846
14B	335	29.5	1.9	0.06440678
14B	335	29	0.8	0.027586207
14B	335	39	1.6	0.041025641
15B	340	29.5	2.1	0.071186441
15B	340	29	0.9	0.031034483
15B	340	39	1.7	0.043589744
3B	0	29.5	29.5	1
3B	0	29	29	1
3B	0	39	39	1



Radial Dist. corresponding to operating vacuum	
Percentage	**Feet**
10.00%	**218**
1.00%	**460**

APPENDIX C

TABULATED REGRESSION ANALYSIS CALCULATIONS

TABLE 1
PREDICTED REDUCTION IN CONCENTRATION
BUILDING 2 SOIL VAPOR EXTRACTION SYSTEM
LOS ANGELES, CALIFORNIA

REGRESSION BASED ON UNDILUTED CONCENTRATIONS

12/13/2001 **Cn = 3800**

Date	DAYS	Co	Co/Cn	ln(Co/Cn)	t (days)	K	$t_{90\%}$	$t_{99\%}$	Projected 90% Concentration Reduction	Projected 99% Concentration Reduction
12/13/2001	0	3800	1.00	0.00	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
1/3/2002	21	930	0.24	-1.41	-21	0.067	34.4	68.7	1/16/2002	2/19/2002
1/18/2002	36	770	0.20	-1.60	-36	0.044	51.9	103.8	2/2/2002	3/26/2002
2/6/2002	55	835	0.22	-1.52	-55	0.028	83.6	167.1	3/6/2002	5/29/2002
2/21/2002	70	800	0.21	-1.56	-70	0.022	103.5	206.9	3/26/2002	7/7/2002
2/27/2002	76	715	0.19	-1.67	-76	0.022	104.8	209.5	3/27/2002	7/10/2002
3/6/2002	83	605	0.16	-1.84	-83	0.022	104.0	208.0	3/27/2002	7/9/2002
3/29/2002	106	274	0.07	-2.63	-106	0.025	92.8	185.6	3/15/2002	6/16/2002
4/4/2002	112	276	0.07	-2.62	-112	0.023	98.4	196.7	3/21/2002	6/27/2002
4/17/2002	125	270	0.07	-2.64	-125	0.021	108.9	217.7	3/31/2002	7/18/2002
5/3/2002	141	178	0.05	-3.06	-141	0.022	106.1	212.1	3/29/2002	7/13/2002
6/4/2002	173	170	0.04	-3.11	-173	0.018	128.2	256.4	4/20/2002	8/26/2002
7/3/2002	202	62	0.02	-4.12	-202	0.020	113.0	226.0	4/5/2002	7/27/2002
8/27/2002	257	32	0.01	-4.78	-257	0.019	123.9	247.7	4/15/2002	8/17/2002

NOTES

	90% Reduction	99% Reduction
Estimated	April 2002	July-Aug 2002

$Cn = Co\, e^{(-k\,t)}$

$0.1 = Cn / Co = e^{-kt}$

$\ln 0.1 = -kt$

$t_{90\%} = 2.303 / k$

$Cn = Co\, e^{(-k\,t)}$

$0.01 = Cn / Co = e^{-kt}$

$\ln 0.01 = -kt$

$t_{99\%} = 4.605 / k$

APPENDIX D

CD-ROM WITH ANALYTICAL LABORATORY RESULTS

EXECUTIVE SUMMARY - Detection Highlights

E1K300179

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
EXHAUST-112901 11/29/01 12:40 001				
Chloromethane	0.014	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0059 J	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.0011 J	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.0023 J	0.010	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.0015 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0022 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0012 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	0.25 J	0.50	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K300179 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST-112901

Sample #: 001 Date Sampled: 11/29/01 12:40 Date Received: 11/29/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.014**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0059 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	**0.0011 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	**0.0023 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**0.0015 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.0022 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K300179 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST-112901

Sample #: 001 Date Sampled: 11/29/01 12:40 Date Received: 11/29/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	**0.0012 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	**0.25 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**

J Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

E1K300328

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
EXHAUST 113001 11/30/01 16:00 001				
Chloromethane	0.014	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0064 J	0.010	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.00086 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0015 J	0.0050	ppm(v/v)	EPA-21 TO-14A
DILUTED INLET_VEW_11B,14B 11/30/01 16:00 002				
Total Non-Methane Hydrocarbons	9.5 J	10	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.016 J	0.040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.33	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.015 J	0.040	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	5.2	0.040	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.059	0.040	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K300328 C-6,HaleyAldrich Air **Date Reported:** 12/14/01

Client Sample ID: EXHAUST 113001

Sample #: 001 Date Sampled: 11/30/01 16:00 Date Received: 11/30/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Total Non-Methane Hydrocarbons	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.014**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0064 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**0.00086 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.0015 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K300328 C-6,HaleyAldrich Air **Date Reported:** 12/14/01

Client Sample ID: EXHAUST 113001

Sample #: 001 Date Sampled: 11/30/01 16:00 Date Received: 11/30/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED INLET_VEW_11B,14B

Sample #: 002 Date Sampled: 11/30/01 16:00 Date Received: 11/30/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Total Non-Methane Hydrocarbons	**9.5 J**	**10**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.080	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.080	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.016 J**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**0.33**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K300328 C-6,HaleyAldrich Air **Date Reported:** 12/14/01

Client Sample ID: DILUTED INLET_VEW_11B,14B

Sample #: 002 Date Sampled: 11/30/01 16:00 Date Received: 11/30/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Carbon disulfide	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.040	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.015 J**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**5.2**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.059**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.60	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K300328 C-6,HaleyAldrich Air **Date Reported:** 12/14/01

Client Sample ID: DILUTED INLET_VEW_11B,14B

Sample #: 002 Date Sampled: 11/30/01 16:00 Date Received: 11/30/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,2,4-Trimethylbenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.080	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.20	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

E1L040280

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DILUTED INLET-120301-VEW 11B,14B 12/03/01 17:15 001				
Trichlorofluoromethane	0.00068 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.019	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.00071 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	0.0023	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.22	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.00059 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.0026	0.0020	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	0.45 J	0.50	ppm(v/v)	EPA-21 TO-14A
EXHAUST-120301-VEW 11B,14B 12/03/01 17:15 002				
Chloromethane	0.010	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0034 J	0.010	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.0016 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0012 J	0.0050	ppm(v/v)	EPA-21 TO-14A
DILUTED INLET-120401-VEW 11B,14B 12/04/01 10:30 003				
Trichlorofluoromethane	0.031 J	0.10	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.73	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.035 J	0.10	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	10	0.10	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.10	0.10	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	22 J	25	ppm(v/v)	EPA-21 TO-14A
EXHAUST-120401-VEW 11B,14B 12/04/01 10:30 004				
Chloromethane	0.0089	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0045 J	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	0.00094 J	0.0050	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET-120301-VEW 11B,14B

Sample #: 001 Date Sampled: 12/03/01 17:15 Date Received: 12/04/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.00068 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**0.019**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.00071 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	**0.0023**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Trichloroethene	**0.22**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.00059 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.0026**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET-120301-VEW 11B,14B

Sample #: 001 Date Sampled: 12/03/01 17:15 Date Received: 12/04/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	**0.45 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**

J Estimated result. Result is less than RL.

Client Sample ID: EXHAUST-120301-VEW 11B,14B

Sample #: 002 Date Sampled: 12/03/01 17:15 Date Received: 12/04/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.010**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST-120301-VEW 11B,14B

Sample #: 002 Date Sampled: 12/03/01 17:15 Date Received: 12/04/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0034 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**0.0016 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.0012 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST-120301-VEW 11B,14B

Sample #: 002 Date Sampled: 12/03/01 17:15 Date Received: 12/04/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	ND	0.50	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED INLET-120401-VEW 11B,14B

Sample #: 003 Date Sampled: 12/04/01 10:30 Date Received: 12/04/01 Matrix: AIR

Volatile Organics by TO-14A				Reviewed
Total Non-Methane Hydrocarbons	**22 J**	**25**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.031 J**	**0.10**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**0.73**	**0.10**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.10	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.50	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.50	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET-120401-VEW 11B,14B

Sample #: 003 Date Sampled: 12/04/01 10:30 Date Received: 12/04/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Chloroform	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.035 J**	**0.10**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**10**	**0.10**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.25	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.10**	**0.10**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	1.5	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.50	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.50	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET-120401-VEW 11B,14B

Sample #: 003 Date Sampled: 12/04/01 10:30 Date Received: 12/04/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

J Estimated result. Result is less than RL.

Client Sample ID: EXHAUST-120401-VEW 11B,14B

Sample #: 004 Date Sampled: 12/04/01 10:30 Date Received: 12/04/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.0089**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0045 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L040280 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST-120401-VEW 11B,14B

Sample #: 004 Date Sampled: 12/04/01 10:30 Date Received: 12/04/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Toluene	**0.00094 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	ND	0.50	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

E1L070222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
EXHAUST_120501_VEW_11B,14B 12/05/01 16:30 001				
Chloromethane	0.0051	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0020 J	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	0.00056 J	0.0050	ppm(v/v)	EPA-21 TO-14A
DILUTED INLET_120501_VEW_11B,14B 12/05/01 16:30 002				
Total Non-Methane Hydrocarbons	35 J	50	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.064 J	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.5	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.073 J	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	18	0.20	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.18 J	0.20	ppm(v/v)	EPA-21 TO-14A
EXHAUST_120601_VEW_11B,14B 12/06/01 10:00 003				
Acetone	0.0025 J	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	0.00065 J	0.0050	ppm(v/v)	EPA-21 TO-14A
DILUTED INLET_120601_VEW_11B,14B 12/06/01 10:00 004				
Total Non-Methane Hydrocarbons	43 J	50	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.059 J	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.6	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.092 J	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	21	0.20	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.26	0.20	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: EXHAUST_120501_VEW_11B,14B

Sample #: 001 Date Sampled: 12/05/01 16:30 Date Received: 12/06/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Total Non-Methane Hydrocarbons	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.0051**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0020 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.00056 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: EXHAUST_120501_VEW_11B,14B
Sample #: 001 Date Sampled: 12/05/01 16:30 Date Received: 12/06/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED INLET_120501_VEW_11B,14B
Sample #: 002 Date Sampled: 12/05/01 16:30 Date Received: 12/06/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

Total Non-Methane Hydrocarbons	**35 J**	**50**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.40	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.064 J**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**1.5**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET_120501_VEW_11B,14B

Sample #: 002 Date Sampled: 12/05/01 16:30 Date Received: 12/06/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Carbon disulfide	ND	1.0	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	1.0	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.073 J**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**18**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.18 J**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	3.0	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	1.0	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET_120501_VEW_11B,14B

Sample #: 002 Date Sampled: 12/05/01 16:30 Date Received: 12/06/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,2,4-Trimethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	2.0	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	1.0	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: EXHAUST_120601_VEW_11B,14B

Sample #: 003 Date Sampled: 12/06/01 10:00 Date Received: 12/06/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Total Non-Methane Hydrocarbons	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0025 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: EXHAUST_120601_VEW_11B,14B

Sample #: 003 Date Sampled: 12/06/01 10:00 Date Received: 12/06/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.00065 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: EXHAUST_120601_VEW_11B,14B
Sample #: 003 Date Sampled: 12/06/01 10:00 Date Received: 12/06/01 Matrix: AIR

Volatile Organics by TO-14A Reviewed

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED INLET_120601_VEW_11B,14B
Sample #: 004 Date Sampled: 12/06/01 10:00 Date Received: 12/06/01 Matrix: AIR

Volatile Organics by TO-14A Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Total Non-Methane Hydrocarbons	**43 J**	**50**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.40	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.059 J**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**1.6**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	1.0	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	1.0	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.092 J**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**21**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.20	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E1L070222 BRC C-6, Torrance HaleyAldrich **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET_120601_VEW_11B,14B

Sample #: 004 Date Sampled: 12/06/01 10:00 Date Received: 12/06/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
4-Methyl-2-pentanone (MIBK)	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.26**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	3.0	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	1.0	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	2.0	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	1.0	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

E1K280317

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
EXHAUST 11/27/01 16:20 001				
Chloromethane	0.018	0.0040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.0040	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0097 J	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.00090 J	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.0040 J	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.0033	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.20	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.014	0.0050	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.0016 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0010 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.00079 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	0.48 J	0.50	ppm(v/v)	EPA-21 TO-14A
EXHAUST 11/28/01 13:20 002				
Chloromethane	0.016	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0061 J	0.010	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.0034 J	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.00059 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0047 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.00051 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0013 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.00079 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	0.084 J	0.50	ppm(v/v)	EPA-21 TO-14A
DILUTED INLET(11B,14B) 11/28/01 15:50 003				
Trichlorofluoromethane	0.011 J	0.040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.22	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.013 J	0.040	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	4.6	0.040	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.059	0.040	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	8.9 J	10	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K280317 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST

Sample #: 001 Date Sampled: 11/27/01 16:20 Date Received: 11/28/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.018**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	**0.0040**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0097 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	**0.00090 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	**0.0040 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.0033**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**0.20**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.014**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.0016 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K280317 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST

Sample #: 001 Date Sampled: 11/27/01 16:20 Date Received: 11/28/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	**0.0010 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	**0.00079 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	**0.48 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**

J Estimated result. Result is less than RL.

Client Sample ID: EXHAUST

Sample #: 002 Date Sampled: 11/28/01 13:20 Date Received: 11/28/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	**0.016**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K280317 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST

Sample #: 002 Date Sampled: 11/28/01 13:20 Date Received: 11/28/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0061 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	**0.0034 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.00059 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.0047 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	**0.00051 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Xylenes (total)	**0.0013 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	**0.00079 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E1K280317 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

Client Sample ID: EXHAUST

Sample #: 002 Date Sampled: 11/28/01 13:20 Date Received: 11/28/01 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	**0.084 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED INLET(11B,14B)

Sample #: 003 Date Sampled: 11/28/01 15:50 Date Received: 11/28/01 Matrix: AIR

Volatile Organics by TO-14A				Reviewed
Dichlorodifluoromethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.080	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.080	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.011 J**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**0.22**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.040	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.040	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc
C-6,HaleyAldrich Air

Lot #: E1K280317 **Date Reported:** 12/10/01

Client Sample ID: DILUTED INLET(11B,14B)
Sample #: 003 Date Sampled: 11/28/01 15:50 Date Received: 11/28/01 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1,1,1-Trichloroethane	**0.013 J**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**4.6**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.059**	**0.040**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.60	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.040	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.040	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.080	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Total Non-Methane Hydrocarbons	**8.9 J**	**10**	**ppm(v/v)**	**EPA-21 TO-14A**

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc PAGE 6

Lot #: E1K280317 C-6,HaleyAldrich Air **Date Reported:** 12/10/01

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD

Client Sample ID: DILUTED INLET(11B,14B)

Sample #: 003 Date Sampled: 11/28/01 15:50 Date Received: 11/28/01 Matrix: AIR

Volatile Organics by TO-14A Reviewed

J Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

E2A030257

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
EXHAUST_BLDG_1_010302 01/03/02 001				
Total Non-Methane Hydrocarbons	14	6.2	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.81	0.025	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.011 J	0.025	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	0.015 J	0.025	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.049	0.025	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.026	0.025	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.012 J	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	1.7	0.025	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	4.4	0.025	ppm(v/v)	EPA-21 TO-14A
Toluene	0.27	0.062	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.074	0.025	ppm(v/v)	EPA-21 TO-14A
DILUTED_INLET_BLDG_1_010302 01/03/02 002				
Total Non-Methane Hydrocarbons	120	120	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	32	0.50	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	0.29 J	0.50	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	1.4	0.50	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.38 J	0.50	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	34	0.50	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	12	0.50	ppm(v/v)	EPA-21 TO-14A
Toluene	1.8	1.2	ppm(v/v)	EPA-21 TO-14A
EXHAUST_BLDG_2_010302 01/03/02 003				
Dichlorodifluoromethane	0.0015 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	0.0092	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0042 J	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.00092 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.00060 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0010 J	0.0050	ppm(v/v)	EPA-21 TO-14A
DILUTED_INLET_BLDG_2_010302 01/03/02 004				
Total Non-Methane Hydrocarbons	20	12	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.019 J	0.050	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.66	0.050	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.044 J	0.050	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.035 J	0.050	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.024 J	0.050	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.28	0.050	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	7.5	0.050	ppm(v/v)	EPA-21 TO-14A
Toluene	0.033 J	0.12	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E2A030257

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
DILUTED_INLET_BLDG_2_010302 01/03/02	**004**			
Tetrachloroethene	0.084	0.050	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: EXHAUST_BLDG_1_010302

Sample #: 001 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Total Non-Methane Hydrocarbons	**14**	**6.2**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	**0.81**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	0.12	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.12	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	**0.011 J**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,2-Dichloroethene	**0.015 J**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethane	**0.049**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
Vinyl acetate	ND	0.12	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	**0.026**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Butanone (MEK)	ND	0.12	ppm(v/v)	EPA-21 TO-14A
Chloroform	**0.012 J**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1,1-Trichloroethane	**1.7**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**4.4**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.12	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.27**	**0.062**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.074**	**0.025**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.38	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: EXHAUST_BLDG_1_010302

Sample #: 001 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1,2-Dibromoethane (EDB)	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.025	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.12	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.025	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.25	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.12	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED_INLET_BLDG_1_010302

Sample #: 002 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

Total Non-Methane Hydrocarbons	**120**	**120**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	1.0	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	**32**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: DILUTED_INLET_BLDG_1_010302

Sample #: 002 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Carbon disulfide	ND	2.5	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	2.5	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.50	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	**0.29 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethane	**1.4**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**
Vinyl acetate	ND	2.5	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	**0.38 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Butanone (MEK)	ND	2.5	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**34**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**12**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	2.5	ppm(v/v)	EPA-21 TO-14A
Toluene	**1.8**	**1.2**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	7.5	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	2.5	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: DILUTED_INLET_BLDG_1_010302

Sample #: 002 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1,2,4-Trimethylbenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	5.0	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	2.5	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: EXHAUST_BLDG_2_010302

Sample #: 003 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

Total Non-Methane Hydrocarbons	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	**0.0015 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	**0.0092**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.0042 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	**0.00092 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: EXHAUST_BLDG_2_010302

Sample #: 003 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**0.00060 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.0010 J**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: EXHAUST_BLDG_2_010302

Sample #: 003 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

J Estimated result. Result is less than RL.

Client Sample ID: DILUTED_INLET_BLDG_2_010302

Sample #: 004 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Total Non-Methane Hydrocarbons	**20**	**12**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	**0.019 J**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1-Dichloroethene	**0.66**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	0.25	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.25	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.050	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	**0.044 J**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
Vinyl acetate	ND	0.25	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	**0.035 J**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Butanone (MEK)	ND	0.25	ppm(v/v)	EPA-21 TO-14A
Chloroform	**0.024 J**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1,1-Trichloroethane	**0.28**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**7.5**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.050	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2A030257 C-6,HaleyAldrich Air **Date Reported:** 1/07/02

Client Sample ID: DILUTED_INLET_BLDG_2_010302

Sample #: 004 Date Sampled: 01/03/02 Date Received: 01/03/02 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
4-Methyl-2-pentanone (MIBK)	ND	0.25	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.033 J**	**0.12**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.084**	**0.050**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.75	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.050	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.25	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.050	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.10	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.25	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

EXECUTIVE SUMMARY - Detection Highlights

E2B080172

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
BLDG2-DILUTED INLET-020602 02/06/02 13:35 001				
Total Non-Methane Hydrocarbons	69	50	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	2.8	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.22	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.21	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.13 J	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.80	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	31	0.20	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.21	0.20	ppm(v/v)	EPA-21 TO-14A
BLDG2-EXHAUST-020602 02/06/02 13:15 002				
Total Non-Methane Hydrocarbons	0.44 J	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.0041	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	0.0017 J	0.0040	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	0.0066	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.00056 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	0.045	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.0018 J	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.011	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.0020	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.020	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.010	0.0050	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.00089 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	0.00061 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0029	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	0.00086 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.00094 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	0.0014 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.0082 J	0.010	ppm(v/v)	EPA-21 TO-14A

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2B080172 BRC C-6, Torrance HaleyAldrich **Date Reported:** 2/12/02

Client Sample ID: BLDG2-DILUTED INLET-020602

Sample #: 001 Date Sampled: 02/06/02 13:35 Date Received: 02/08/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Total Non-Methane Hydrocarbons	**69**	**50**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.40	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	**2.8**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon disulfide	ND	1.0	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	**0.22**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
Vinyl acetate	ND	1.0	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	**0.21**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Butanone (MEK)	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Chloroform	**0.13 J**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
1,1,1-Trichloroethane	**0.80**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**31**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	1.0	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.50	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.21**	**0.20**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	3.0	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E2B080172 BRC C-6, Torrance HaleyAldrich **Date Reported:** 2/12/02

Client Sample ID: BLDG2-DILUTED INLET-020602

Sample #: 001 Date Sampled: 02/06/02 13:35 Date Received: 02/08/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1,2-Dibromoethane (EDB)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.20	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	1.0	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.20	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	2.0	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.40	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	1.0	ppm(v/v)	EPA-21 TO-14A

J Estimated result. Result is less than RL.

Client Sample ID: BLDG2-EXHAUST-020602

Sample #: 002 Date Sampled: 02/06/02 13:15 Date Received: 02/08/02 Matrix: AIR

Volatile Organics by TO-14A — Reviewed

Total Non-Methane Hydrocarbons	**0.44 J**	**0.50**	**ppm(v/v)**	**EPA-21 TO-14A**
Dichlorodifluoromethane	**0.0041**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Chloromethane	**0.0017 J**	**0.0040**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	**0.0066**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	**0.00056 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: E2B080172 BRC C-6, Torrance HaleyAldrich **Date Reported:** 2/12/02

Client Sample ID: BLDG2-EXHAUST-020602

Sample #: 002 Date Sampled: 02/06/02 13:15 Date Received: 02/08/02 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	**0.045**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Methylene chloride	**0.0018 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	**0.011**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	**0.0020**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	**0.020**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	**0.010**	**0.0050**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	**0.00089 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	**0.00061 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Xylenes (total)	**0.0029**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	**0.00086 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Haley & Aldrich Inc

Lot #: E2B080172 BRC C-6, Torrance HaleyAldrich **Date Reported:** 2/12/02

Client Sample ID: BLDG2-EXHAUST-020602

Sample #: 002 Date Sampled: 02/06/02 13:15 Date Received: 02/08/02 Matrix: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by TO-14A				Reviewed
1,2,4-Trimethylbenzene	**0.00094 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,3-Dichlorobenzene	**0.0014 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	**0.0082 J**	**0.010**	**ppm(v/v)**	**EPA-21 TO-14A**

J Estimated result. Result is less than RL.

SEVERN TRENT SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

March 11, 2002

STL LOT NUMBER: E2C060325
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the three samples received under chain of custody by STL Los Angeles on March 6, 2002. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. Please note that the samples for TO-14A were received in Tedlar Bags. Summa Canisters are the appropriate sample collection media for this method. The use of Tedlar Bags is a modification of the method. Any matrix related anomaly is footnoted within the report.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager

CC: Project File

Page 1 of 000027 total pages in this report.

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0003540

SEVERN TRENT SERVICES

LOT NUMBER E2C060325

Nonconformance 05-03032

Affected Samples:
E2C060325 (2): BLDG2_DILUTED INLET

Affected Methods:
TO-14A

Case Narrative:
The analyst analyzed the sample with an excess dilution. Upon re-analysis the wrong sample was inadvertantly analyzed and reported.

Corrective Action:
The sample was reanalyzed at the correct dilution outside of holding time. Both results are reported. The diluted analysis inside the holding time was reported as a duplicate and confirms the results of the analysis outside holding time. The analyst was informed of his error and trained on the need for careful organization of samples and screen data.

ACCREDITED IN ACCORDANCE WITH nelac

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 3/6/02	Chain of Custody Number: 050437
Address: 9040 FRIARS RD SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E2C06032T	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact	Lab Contact	
Project Name and Location (State): C6 LOS ANGELES	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 28735-002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): TO-14	Special Instructions/ Conditions of Receipt
BLDG 2 - EXHAUST	3/6/02	9:15	X					X							X	
BLDG 2 - DILUTED INLET	3/6/02	10:47	X					X							X	

000003

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other NORMAL

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	3/6/02	19:20	1. Received By: [signature]	3/6/02	1920
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0003542

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 3/6/02

Quantims Lot #: E2C060325 Quote #: 42295
Client Name: Haley & Aldrich Project: Boeing C-6
Received by: RS Date/Time Received: 3/6/02 19:20
Delivered by : [X] Client [ ] Airborne [ ] Fed Ex [ ] DHL [ ] In-House Courier [ ] Rey B.
[ ] UPS [ ] DES [ ] Other _____

Initial / Date

Custody Seal Status: [ ] Intact [ ] Broken [X] None ..... RS 3/6/02
Custody Seal #(s): _____ [X] No Seal # .....
Sample Container(s): [ ] STL-LA [ ] Client [ ] N/A .....
Temperature(s) (Cooler/blank) in °C: N/A Correction factor -0.1°C (Corrected Temp.) ____ ...
Thermometer Used : ID: B [X] IR (Infra-red) [ ] Digital (Probe) .....
Samples: [X] Intact [ ] Broken [ ] Other _____ .....
Anomalies: [X] No [ ] Yes (See Clouseau) .....
Labeled by ....RS.....
Labeling checked by .....

Turn Around Time: [ ] RUSH-24HR [ ] RUSH-48HR [ ] RUSH-72HR [X] NORMAL .....
Short-Hold Notification: [ ] Ph [ ] Wet Chem [ ] Metals (Filter/Pres) [ ] Encore [X] N/A ...
Outside Analysis(es) (Test/Lab/Date Sent Out) : none

_____ .....
_____ .....
_____ .....
_____ .....

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1, 2										PH
VOAh /*											N/A
1LTB	1										

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: [signature] 3/6/02 REVIEWED BY/DATE: [signature] 03/11/02

PRC Ver.: 6 081401 KRF QA/NACA01W:\Prices\Sample Control Forms

000004

BOE-C6-0003543

SEVERN TRENT SERVICES

Analytical Report

000005

EXECUTIVE SUMMARY - Detection Highlights

E2C060325

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
BLDG2_EXHAUST 03/06/02 09:15 001				
Total Non-Methane Hydrocarbons	0.29 J	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.011	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0011 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.022	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.013	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0049 J	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.062	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.016	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.0033	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.012	0.0050	ppm(v/v)	EPA-21 TO-14A
BLDG2_DILUTED INLET 03/06/02 10:47 002				
1,1-Dichloroethene	1.5	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.6 J	2.0	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.11 J,B	0.20	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.086 J	0.20	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.12 J	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.15 J	0.20	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.37	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	26	0.20	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	26	2.0	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.10 J	0.20	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2C060325

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2C060325

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EV2GK	001	BLDG2_EXHAUST	03/06/02	09:15
EV2GL	002	BLDG2_DILUTED INLET	03/06/02	10:47

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.

HALEY & ALDRICH INC

Client Sample ID: BLDG2_EXHAUST

GC/MS Volatiles

Lot-Sample #...:	E2C060325-001	Work Order #...:	EV2GK1AA	Matrix.....:	AIR
Date Sampled...:	03/06/02 09:15	Date Received..:	03/06/02 19:20	MS Run #.....:	
Prep Date.....:	03/07/02	Analysis Date..:	03/07/02		
Prep Batch #...:	2067409	Analysis Time..:	16:13		
Dilution Factor:	1				
Analyst ID.....:	117751	Instrument ID..:	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**0.29 J**	**0.50**	**ppm(v/v)**	**0.10**
Dichlorodifluoromethane	**0.011**	**0.0020**	**ppm(v/v)**	**0.00050**
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**0.0011 J**	**0.0020**	**ppm(v/v)**	**0.00080**
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Trichlorofluoromethane	**0.022**	**0.0020**	**ppm(v/v)**	**0.00050**
1,1-Dichloroethene	**0.013**	**0.0020**	**ppm(v/v)**	**0.00050**
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
Acetone	**0.0049 J**	**0.010**	**ppm(v/v)**	**0.0020**
Methylene chloride	**0.062**	**0.0020**	**ppm(v/v)**	**0.00080**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
2-Butanone (MEK)	ND	0.010	ppm(v/v)	0.0020
Chloroform	ND	0.0020	ppm(v/v)	0.00080
1,1,1-Trichloroethane	**0.016**	**0.0020**	**ppm(v/v)**	**0.00050**
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Benzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
Trichloroethene	**0.0033**	**0.0020**	**ppm(v/v)**	**0.00060**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Toluene	**0.012**	**0.0050**	**ppm(v/v)**	**0.00050**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00050
2-Hexanone	ND	0.030	ppm(v/v)	0.0010

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: BLDG2_EXHAUST

GC/MS Volatiles

Lot-Sample #...: E2C060325-001 Work Order #...: EV2GK1AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Ethylbenzene	ND	0.0020	ppm(v/v)	0.00050
Xylenes (total)	ND	0.0020	ppm(v/v)	0.00080
Styrene	ND	0.0020	ppm(v/v)	0.00060
Bromoform	ND	0.0020	ppm(v/v)	0.00050
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
4-Ethyltoluene	ND	0.0020	ppm(v/v)	0.00070
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00050
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00060
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	0.00060
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	0.00050

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

BLDG2_EXHAUST

GC/MS Volatiles

Lot-Sample #: E2C060325-001 **Work Order #:** EV2GK1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
propane	74-98-6	0.0087	M	2.188	ppm(v/v)
isobutane	75-28-5	0.060	M	2.4587	ppm(v/v)
unknown hydrocarbon		0.016	M	2.6752	ppm(v/v)
isopropyl alcohol	67-63-0	0.0056	M	5.0572	ppm(v/v)
unknown hydrocarbon		0.0082	M	17.806	ppm(v/v)
unknown alkane		0.0052	M	19.755	ppm(v/v)

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Client Sample ID: BLDG2_DILUTED INLET

GC/MS Volatiles

Lot-Sample #...:	E2C060325-002	**Work Order #...:**	EV2GL1AA	**Matrix.....:**	AIR
Date Sampled...:	03/06/02 10:47	**Date Received..:**	03/06/02 19:20	**MS Run #.....:**	
Prep Date.....:	03/11/02	**Analysis Date..:**	03/11/02		
Prep Batch #...:	2071413	**Analysis Time..:**	19:00		
Dilution Factor:	100				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	0.20	ppm(v/v)	0.050
Chloromethane	ND	0.40	ppm(v/v)	0.10
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.20	ppm(v/v)	0.080
Vinyl chloride	ND	0.20	ppm(v/v)	0.080
Bromomethane	ND	0.20	ppm(v/v)	0.10
Chloroethane	ND	0.40	ppm(v/v)	0.080
Trichlorofluoromethane	ND	0.20	ppm(v/v)	0.050
1,1-Dichloroethene	**1.5**	**0.20**	**ppm(v/v)**	**0.050**
Carbon disulfide	ND	1.0	ppm(v/v)	0.20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	ppm(v/v)	0.050
Acetone	ND	1.0	ppm(v/v)	0.20
Methylene chloride	**0.11 J,B**	**0.20**	**ppm(v/v)**	**0.080**
trans-1,2-Dichloroethene	ND	0.20	ppm(v/v)	0.050
1,1-Dichloroethane	**0.086 J**	**0.20**	**ppm(v/v)**	**0.050**
Vinyl acetate	ND	1.0	ppm(v/v)	0.20
cis-1,2-Dichloroethene	**0.12 J**	**0.20**	**ppm(v/v)**	**0.080**
2-Butanone (MEK)	ND	1.0	ppm(v/v)	0.20
Chloroform	**0.15 J**	**0.20**	**ppm(v/v)**	**0.080**
1,1,1-Trichloroethane	**0.37**	**0.20**	**ppm(v/v)**	**0.050**
Carbon tetrachloride	ND	0.20	ppm(v/v)	0.050
Benzene	ND	0.20	ppm(v/v)	0.080
1,2-Dichloroethane	ND	0.20	ppm(v/v)	0.080
Trichloroethene	**26**	**0.20**	**ppm(v/v)**	**0.060**
1,2-Dichloropropane	ND	0.20	ppm(v/v)	0.080
Bromodichloromethane	ND	0.20	ppm(v/v)	0.080
cis-1,3-Dichloropropene	ND	0.20	ppm(v/v)	0.050
4-Methyl-2-pentanone (MIBK)	ND	1.0	ppm(v/v)	0.20
Toluene	ND	0.50	ppm(v/v)	0.050
trans-1,3-Dichloropropene	ND	0.20	ppm(v/v)	0.080
1,1,2-Trichloroethane	ND	0.20	ppm(v/v)	0.060
Tetrachloroethene	**0.10 J**	**0.20**	**ppm(v/v)**	**0.050**
2-Hexanone	ND	3.0	ppm(v/v)	0.10
Dibromochloromethane	ND	0.20	ppm(v/v)	0.050
1,2-Dibromoethane (EDB)	ND	0.20	ppm(v/v)	0.050

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: BLDG2_DILUTED INLET

GC/MS Volatiles

Lot-Sample #...: E2C060325-002 **Work Order #...:** EV2GL1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Chlorobenzene	ND	0.20	ppm(v/v)	0.050
Ethylbenzene	ND	0.20	ppm(v/v)	0.050
Xylenes (total)	ND	0.20	ppm(v/v)	0.080
Styrene	ND	0.20	ppm(v/v)	0.060
Bromoform	ND	0.20	ppm(v/v)	0.050
1,1,2,2-Tetrachloroethane	ND	0.20	ppm(v/v)	0.050
Benzyl chloride	ND	1.0	ppm(v/v)	0.080
4-Ethyltoluene	ND	0.20	ppm(v/v)	0.070
1,3,5-Trimethylbenzene	ND	0.20	ppm(v/v)	0.080
1,2,4-Trimethylbenzene	ND	0.20	ppm(v/v)	0.050
1,3-Dichlorobenzene	ND	0.20	ppm(v/v)	0.060
1,4-Dichlorobenzene	ND	0.20	ppm(v/v)	0.080
1,2-Dichlorobenzene	ND	0.20	ppm(v/v)	0.080
1,2,4-Trichloro-benzene	ND	2.0	ppm(v/v)	0.060
Hexachlorobutadiene	ND	0.40	ppm(v/v)	0.10
Methyl tert-butyl ether (MTBE)	ND	1.0	ppm(v/v)	0.050

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

HALEY & ALDRICH INC

BLDG2_DILUTED INLET

GC/MS Volatiles

Lot-Sample #: E2C060325-002 **Work Order #:** EV2GL1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: BLDG2_DILUTED INLET

GC/MS Volatiles

Lot-Sample #...:	E2C060325-002	**Work Order #...:**	EV2GL2AA	**Matrix.....:**	AIR
Date Sampled...:	03/06/02 10:47	**Date Received..:**	03/06/02 19:20	**MS Run #.....:**	
Prep Date.....:	03/07/02	**Analysis Date..:**	03/07/02		
Prep Batch #...:	2067409	**Analysis Time..:**	14:24		
Dilution Factor:	1000				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	ND	500	ppm(v/v)	100
Dichlorodifluoromethane	ND	2.0	ppm(v/v)	0.50
Chloromethane	ND	4.0	ppm(v/v)	1.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.0	ppm(v/v)	0.80
Vinyl chloride	ND	2.0	ppm(v/v)	0.80
Bromomethane	ND	2.0	ppm(v/v)	1.0
Chloroethane	ND	4.0	ppm(v/v)	0.80
Trichlorofluoromethane	ND	2.0	ppm(v/v)	0.50
1,1-Dichloroethene	**1.6 J**	**2.0**	**ppm(v/v)**	**0.50**
Carbon disulfide	ND	10	ppm(v/v)	2.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	ppm(v/v)	0.50
Acetone	ND	10	ppm(v/v)	2.0
Methylene chloride	ND	2.0	ppm(v/v)	0.80
trans-1,2-Dichloroethene	ND	2.0	ppm(v/v)	0.50
1,1-Dichloroethane	ND	2.0	ppm(v/v)	0.50
Vinyl acetate	ND	10	ppm(v/v)	2.0
cis-1,2-Dichloroethene	ND	2.0	ppm(v/v)	0.80
2-Butanone (MEK)	ND	10	ppm(v/v)	2.0
Chloroform	ND	2.0	ppm(v/v)	0.80
1,1,1-Trichloroethane	ND	2.0	ppm(v/v)	0.50
Carbon tetrachloride	ND	2.0	ppm(v/v)	0.50
Benzene	ND	2.0	ppm(v/v)	0.80
1,2-Dichloroethane	ND	2.0	ppm(v/v)	0.80
Trichloroethene	**26**	**2.0**	**ppm(v/v)**	**0.60**
1,2-Dichloropropane	ND	2.0	ppm(v/v)	0.80
Bromodichloromethane	ND	2.0	ppm(v/v)	0.80
cis-1,3-Dichloropropene	ND	2.0	ppm(v/v)	0.50
4-Methyl-2-pentanone (MIBK)	ND	10	ppm(v/v)	2.0
Toluene	ND	5.0	ppm(v/v)	0.50
trans-1,3-Dichloropropene	ND	2.0	ppm(v/v)	0.80
1,1,2-Trichloroethane	ND	2.0	ppm(v/v)	0.60
Tetrachloroethene	ND	2.0	ppm(v/v)	0.50
2-Hexanone	ND	30	ppm(v/v)	1.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: BLDG2_DILUTED INLET

GC/MS Volatiles

Lot-Sample #...: E2C060325-002 Work Order #...: EV2GL2AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	2.0	ppm(v/v)	0.50
1,2-Dibromoethane (EDB)	ND	2.0	ppm(v/v)	0.50
Chlorobenzene	ND	2.0	ppm(v/v)	0.50
Ethylbenzene	ND	2.0	ppm(v/v)	0.50
Xylenes (total)	ND	2.0	ppm(v/v)	0.80
Styrene	ND	2.0	ppm(v/v)	0.60
Bromoform	ND	2.0	ppm(v/v)	0.50
1,1,2,2-Tetrachloroethane	ND	2.0	ppm(v/v)	0.50
Benzyl chloride	ND	10	ppm(v/v)	0.80
4-Ethyltoluene	ND	2.0	ppm(v/v)	0.70
1,3,5-Trimethylbenzene	ND	2.0	ppm(v/v)	0.80
1,2,4-Trimethylbenzene	ND	2.0	ppm(v/v)	0.50
1,3-Dichlorobenzene	ND	2.0	ppm(v/v)	0.60
1,4-Dichlorobenzene	ND	2.0	ppm(v/v)	0.80
1,2-Dichlorobenzene	ND	2.0	ppm(v/v)	0.80
1,2,4-Trichloro-benzene	ND	20	ppm(v/v)	0.60
Hexachlorobutadiene	ND	4.0	ppm(v/v)	1.0
Methyl tert-butyl ether (MTBE)	ND	10	ppm(v/v)	0.50

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

BLDG2_DILUTED INLET

GC/MS Volatiles

Lot-Sample #: E2C060325-002 **Work Order #:** EV2GL2AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

SEVERN
TRENT
SERVICES

QA/QC

QC DATA ASSOCIATION SUMMARY

E2C060325

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2067409	
002	AIR	EPA-21 TO-14A		2067409	
	AIR	EPA-21 TO-14A		2071413	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2C060325
MB Lot-Sample #: M2C080000-409

Work Order #...: EV59R1AA

Matrix.....: AIR

Prep Date.....: 03/07/02

Analysis Time..: 11:52

Analysis Date..: 03/07/02

Prep Batch #...: 2067409

Instrument ID..: MSB

Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2C060325 **Work Order #...:** EV59R1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2C060325
MB Lot-Sample #: M2C120000-413

Work Order #...: EV9VN1AA

Matrix.....: AIR

Prep Date.....: 03/11/02

Analysis Time..: 11:10

Analysis Date..: 03/11/02
Dilution Factor: 1

Prep Batch #...: 2071413

Instrument ID..: MSB

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	**0.0011 J**	**0.0020**	**ppm(v/v)**	**EPA-21 TO-14A**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2C060325 **Work Order #...:** EV9VN1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

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

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2C060325 Work Order #...: EV59R1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2C080000-409 EV59R1AD-LCSD
Prep Date.....: 03/07/02 Analysis Date..: 03/07/02
Prep Batch #...: 2067409 Analysis Time..: 10:43
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0528	ppm(v/v)	89		EPA-21 TO-14A
	0.0592	0.0533	ppm(v/v)	90	0.88	EPA-21 TO-14A
Methylene chloride	0.0587	0.0509	ppm(v/v)	87		EPA-21 TO-14A
	0.0587	0.0533	ppm(v/v)	91	4.6	EPA-21 TO-14A
Trichloroethene	0.0594	0.0544	ppm(v/v)	91		EPA-21 TO-14A
	0.0594	0.0541	ppm(v/v)	91	0.55	EPA-21 TO-14A
Toluene	0.0557	0.0568	ppm(v/v)	102		EPA-21 TO-14A
	0.0557	0.0581	ppm(v/v)	104	2.2	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0573	ppm(v/v)	104		EPA-21 TO-14A
	0.0554	0.0592	ppm(v/v)	107	3.3	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 #...: E2C060325 Work Order #...: EV59R1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2C080000-409 EV59R1AD-LCSD
Prep Date.....: 03/07/02 Analysis Date..: 03/07/02
Prep Batch #...: 2067409 Analysis Time..: 10:43
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	89	(70 - 125)			EPA-21 TO-14A
	90	(70 - 125)	0.88	(0-20)	EPA-21 TO-14A
Methylene chloride	87	(75 - 120)			EPA-21 TO-14A
	91	(75 - 120)	4.6	(0-20)	EPA-21 TO-14A
Trichloroethene	91	(80 - 125)			EPA-21 TO-14A
	91	(80 - 125)	0.55	(0-20)	EPA-21 TO-14A
Toluene	102	(70 - 120)			EPA-21 TO-14A
	104	(70 - 120)	2.2	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	104	(70 - 130)			EPA-21 TO-14A
	107	(70 - 130)	3.3	(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 #...: E2C060325 Work Order #...: EV9VN1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2C120000-413 EV9VN1AD-LCSD
Prep Date.....: 03/11/02 Analysis Date..: 03/11/02
Prep Batch #...: 2071413 Analysis Time..: 10:00
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0583	ppm(v/v)	98		EPA-21 TO-14A
	0.0592	0.0592	ppm(v/v)	100	1.6	EPA-21 TO-14A
Methylene chloride	0.0587	0.0553	ppm(v/v)	94		EPA-21 TO-14A
	0.0587	0.0564	ppm(v/v)	96	2.0	EPA-21 TO-14A
Trichloroethene	0.0594	0.0566	ppm(v/v)	95		EPA-21 TO-14A
	0.0594	0.0565	ppm(v/v)	95	0.23	EPA-21 TO-14A
Toluene	0.0557	0.0602	ppm(v/v)	108		EPA-21 TO-14A
	0.0557	0.0593	ppm(v/v)	107	1.4	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0572	ppm(v/v)	103		EPA-21 TO-14A
	0.0554	0.0562	ppm(v/v)	101	1.7	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 #...: E2C060325
LCS Lot-Sample#: M2C120000-413
Prep Date.....: 03/11/02
Prep Batch #...: 2071413
Dilution Factor: 1
Analyst ID.....: 117751

Work Order #...: EV9VN1AC-LCS
EV9VN1AD-LCSD
Analysis Date..: 03/11/02
Analysis Time..: 10:00
Instrument ID..: MSB

Matrix.....: AIR

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	98	(70 - 125)			EPA-21 TO-14A
	100	(70 - 125)	1.6	(0-20)	EPA-21 TO-14A
Methylene chloride	94	(75 - 120)			EPA-21 TO-14A
	96	(75 - 120)	2.0	(0-20)	EPA-21 TO-14A
Trichloroethene	95	(80 - 125)			EPA-21 TO-14A
	95	(80 - 125)	0.23	(0-20)	EPA-21 TO-14A
Toluene	108	(70 - 120)			EPA-21 TO-14A
	107	(70 - 120)	1.4	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	103	(70 - 130)			EPA-21 TO-14A
	101	(70 - 130)	1.7	(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

SEVERN TRENT SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

April 10, 2002

STL LOT NUMBER: E2D040357
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on April 4, 2002. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Any matrix related anomaly is footnoted within the report. Please note that the samples for TO-14A were received in Tedlar Bags. Summa Canisters are the appropriate sample collection media for this method. The use of Tedlar Bags is a modification of the method.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager

CC: Project File

Page 1 of 000019 total pages in this report.

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0003567

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 4/4/02	Chain of Custody Number: 024941
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619 - 280 - 9210	Lab Number: E2D040357	Page 1 of 1
City: SAN DIEGO; State: CA; Zip Code: 92108	Site Contact: TRAVIS HAMMOND	Lab Contact:	
Project Name and Location (State): FORMER BOEING C6 FACILITY	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28335-002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): TO-14	Special Instructions/ Conditions of Receipt
GAC0002D_AV040402_0001	4/4/02	17:00	1					X							X	
GAC0002E_AV040402_0001	4/4/02	17:00	1					X							X	

000002

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other NORMAL

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 4/4/02	Time: 20:00	1. Received By: [signature]	Date: 4/4/02	Time: 20:00
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0003568

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 4/04/02

Quantims Lot #: E2D040357
Quote #: 4229T
Client Name: Haley & Aldrich
Project: Boeing C-6
Received by: J.B.
Date/Time Received: 4/4/02 20:00
Delivered by : [X] Client [ ] Airborne [ ] Fed Ex [ ] DHL [ ] In-House Courier [ ] Rey B.
[ ] UPS [ ] DES [ ] Other _____

****

Initial / Date

Custody Seal Status: [ ] Intact [ ] Broken [X] None ..... AR 4/4/02
Custody Seal #(s): _____ [X] No Seal # .....
Sample Container(s): [ ] STL-LA [ ] Client [ ] N/A .....
Temperature(s) (Cooler/blank) in °C: _____ Correction factor -0.1°C (Corrected Temp.) N/A...
Thermometer Used : ID: B [X] IR (Infra-red) [ ] Digital (Probe) ...N.A...
Samples: [X] Intact [ ] Broken [ ] Other _____ .....
Anomalies: [X] No [ ] Yes (See Clouseau) .....
Labeled by ...AR.....
Labeling checked by .....

****

Turn Around Time: [ ] RUSH-24HR [ ] RUSH-48HR [ ] RUSH-72HR [X] NORMAL .....
Short-Hold Notification: [ ] Ph [ ] Wet Chem [ ] Metals (Filter/Pres) [ ] Encore [X] N/A ...
Outside Analysis(es) (Test/Lab/Date Sent Out) : none -

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1, 2										PH
VOAh /*											N/A
TB, 1L	1										—

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Precolke 4/4/02 REVIEWED BY/DATE: [signature] 4/4/02

PRC Ver. 6 081401 KRF
QANACA01\N:\Precis\Sample Control Forms

SEVERN TRENT SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E2D040357

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002D_AV040402_0001 04/04/02 17:00 001				
Total Non-Methane Hydrocarbons	47	25	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.045 J	0.10	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.7	0.10	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.049 J	0.10	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.096 J	0.10	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.12	0.10	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.26	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.31	0.10	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	19	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	0.032 J	0.10	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.18	0.10	ppm(v/v)	EPA-21 TO-14A
GAC0002E_AV040402_0001 04/04/02 17:00 002				
Acetone	0.0033 J	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.0014 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.00068 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0011 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.00084 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.00064 J	0.010	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2D040357

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2D040357

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EXE9C	001	GAC0002D_AV040402_0001	04/04/02	17:00
EXE9D	002	GAC0002E_AV040402_0001	04/04/02	17:00

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV040402_0001

GC/MS Volatiles

Lot-Sample #...:	E2D040357-001	Work Order #...:	EXE9C1AA	Matrix.....:	AIR
Date Sampled...:	04/04/02 17:00	Date Received..:	04/04/02 20:00	MS Run #.....:	
Prep Date.....:	04/05/02	Analysis Date..:	04/05/02		
Prep Batch #...:	2098508	Analysis Time..:	20:20		
Dilution Factor:	50				
Analyst ID.....:	117751	Instrument ID..:	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**47**	**25**	**ppm(v/v)**	**5.0**
Dichlorodifluoromethane	ND	0.10	ppm(v/v)	0.025
Chloromethane	ND	0.20	ppm(v/v)	0.050
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.10	ppm(v/v)	0.040
Vinyl chloride	ND	0.10	ppm(v/v)	0.040
Bromomethane	ND	0.10	ppm(v/v)	0.050
Chloroethane	ND	0.20	ppm(v/v)	0.040
Trichlorofluoromethane	**0.045 J**	**0.10**	**ppm(v/v)**	**0.025**
1,1-Dichloroethene	**1.7**	**0.10**	**ppm(v/v)**	**0.025**
Carbon disulfide	ND	0.50	ppm(v/v)	0.10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.10	ppm(v/v)	0.025
Acetone	ND	0.50	ppm(v/v)	0.10
Methylene chloride	**0.049 J**	**0.10**	**ppm(v/v)**	**0.040**
trans-1,2-Dichloroethene	ND	0.10	ppm(v/v)	0.025
1,1-Dichloroethane	**0.096 J**	**0.10**	**ppm(v/v)**	**0.025**
Vinyl acetate	ND	0.50	ppm(v/v)	0.10
cis-1,2-Dichloroethene	**0.12**	**0.10**	**ppm(v/v)**	**0.040**
2-Butanone (MEK)	ND	0.50	ppm(v/v)	0.10
Chloroform	**0.26**	**0.10**	**ppm(v/v)**	**0.040**
1,1,1-Trichloroethane	**0.31**	**0.10**	**ppm(v/v)**	**0.025**
Carbon tetrachloride	ND	0.10	ppm(v/v)	0.025
Benzene	ND	0.10	ppm(v/v)	0.040
1,2-Dichloroethane	ND	0.10	ppm(v/v)	0.040
Trichloroethene	**19**	**0.10**	**ppm(v/v)**	**0.030**
1,2-Dichloropropane	ND	0.10	ppm(v/v)	0.040
Bromodichloromethane	ND	0.10	ppm(v/v)	0.040
cis-1,3-Dichloropropene	ND	0.10	ppm(v/v)	0.025
4-Methyl-2-pentanone (MIBK)	ND	0.50	ppm(v/v)	0.10
Toluene	ND	0.25	ppm(v/v)	0.025
trans-1,3-Dichloropropene	ND	0.10	ppm(v/v)	0.040
1,1,2-Trichloroethane	**0.032 J**	**0.10**	**ppm(v/v)**	**0.030**
Tetrachloroethene	**0.18**	**0.10**	**ppm(v/v)**	**0.025**
2-Hexanone	ND	1.5	ppm(v/v)	0.050

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV040402_0001

GC/MS Volatiles

Lot-Sample #...: E2D040357-001 **Work Order #...:** EXE9C1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.10	ppm(v/v)	0.025
1,2-Dibromoethane (EDB)	ND	0.10	ppm(v/v)	0.025
Chlorobenzene	ND	0.10	ppm(v/v)	0.025
Ethylbenzene	ND	0.10	ppm(v/v)	0.025
Xylenes (total)	ND	0.10	ppm(v/v)	0.040
Styrene	ND	0.10	ppm(v/v)	0.030
Bromoform	ND	0.10	ppm(v/v)	0.025
1,1,2,2-Tetrachloroethane	ND	0.10	ppm(v/v)	0.025
Benzyl chloride	ND	0.50	ppm(v/v)	0.040
4-Ethyltoluene	ND	0.10	ppm(v/v)	0.035
1,3,5-Trimethylbenzene	ND	0.10	ppm(v/v)	0.040
1,2,4-Trimethylbenzene	ND	0.10	ppm(v/v)	0.025
1,3-Dichlorobenzene	ND	0.10	ppm(v/v)	0.030
1,4-Dichlorobenzene	ND	0.10	ppm(v/v)	0.040
1,2-Dichlorobenzene	ND	0.10	ppm(v/v)	0.040
1,2,4-Trichloro-benzene	ND	1.0	ppm(v/v)	0.030
Hexachlorobutadiene	ND	0.20	ppm(v/v)	0.050
Methyl tert-butyl ether (MTBE)	ND	0.50	ppm(v/v)	0.025

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002D_AV040402_0001

GC/MS Volatiles

Lot-Sample #: E2D040357-001 **Work Order #:** EXE9C1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV040402_0001

GC/MS Volatiles

Lot-Sample #...:	E2D040357-002	**Work Order #...:**	EXE9D1AA	**Matrix.....:**	AIR
Date Sampled...:	04/04/02 17:00	**Date Received..:**	04/04/02 20:00	**MS Run #.....:**	
Prep Date.....:	04/05/02	**Analysis Date..:**	04/05/02		
Prep Batch #...:	2098508	**Analysis Time..:**	20:51		
Dilution Factor:	1				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	ND	0.50	ppm(v/v)	0.10
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	0.00050
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
Acetone	**0.0033 J**	**0.010**	**ppm(v/v)**	**0.0020**
Methylene chloride	**0.0014 J**	**0.0020**	**ppm(v/v)**	**0.00080**
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
2-Butanone (MEK)	ND	0.010	ppm(v/v)	0.0020
Chloroform	ND	0.0020	ppm(v/v)	0.00080
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Benzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
Trichloroethene	**0.00068 J**	**0.0020**	**ppm(v/v)**	**0.00060**
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Toluene	**0.0011 J**	**0.0050**	**ppm(v/v)**	**0.00050**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00050
2-Hexanone	ND	0.030	ppm(v/v)	0.0010

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV040402_0001

GC/MS Volatiles

Lot-Sample #...: E2D040357-002 Work Order #...: EXE9D1AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Ethylbenzene	ND	0.0020	ppm(v/v)	0.00050
Xylenes (total)	**0.00084 J**	**0.0020**	**ppm(v/v)**	**0.00080**
Styrene	ND	0.0020	ppm(v/v)	0.00060
Bromoform	ND	0.0020	ppm(v/v)	0.00050
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
4-Ethyltoluene	ND	0.0020	ppm(v/v)	0.00070
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00050
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00060
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	0.00060
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010
Methyl tert-butyl ether (MTBE)	**0.00064 J**	**0.010**	**ppm(v/v)**	**0.00050**

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV040402_0001

GC/MS Volatiles

Lot-Sample #: E2D040357-002 **Work Order #:** EXE9D1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
unknown branched alkane		0.011	M	20.218	ppm(v/v)

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

SEVERN
TRENT
SERVICES

QA/QC

000014

QC DATA ASSOCIATION SUMMARY

E2D040357

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2098508	
002	AIR	EPA-21 TO-14A		2098508	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D040357
MB Lot-Sample #: M2D080000-508

Work Order #...: EXKCA1AA

Matrix.....: AIR

Prep Date.....: 04/05/02

Analysis Time..: 19:20

Analysis Date..: 04/05/02
Dilution Factor: 1

Prep Batch #...: 2098508

Instrument ID..: MSB

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D040357 Work Order #...: EXKCA1AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	**0.00070 J**	**0.020**	**ppm(v/v)**	**EPA-21 TO-14A**
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

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

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E2D040357
LCS Lot-Sample#: M2D080000-508
Prep Date.....: 04/05/02
Prep Batch #...: 2098508
Dilution Factor: 1
Analyst ID.....: 117751

Work Order #...: EXKCA1AC-LCS
EXKCA1AD-LCSD
Analysis Date..: 04/05/02
Analysis Time..: 18:10
Instrument ID..: MSB

Matrix.....: AIR

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	106	(70 - 125)			EPA-21 TO-14A
	105	(70 - 125)	0.73	(0-20)	EPA-21 TO-14A
Methylene chloride	99	(75 - 120)			EPA-21 TO-14A
	98	(75 - 120)	1.7	(0-20)	EPA-21 TO-14A
Trichloroethene	103	(80 - 125)			EPA-21 TO-14A
	102	(80 - 125)	0.35	(0-20)	EPA-21 TO-14A
Toluene	107	(70 - 120)			EPA-21 TO-14A
	107	(70 - 120)	0.46	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	106	(70 - 130)			EPA-21 TO-14A
	107	(70 - 130)	1.2	(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 #...: E2D040357 Work Order #...: EXKCA1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2D080000-508 EXKCA1AD-LCSD
Prep Date.....: 04/05/02 Analysis Date..: 04/05/02
Prep Batch #...: 2098508 Analysis Time..: 18:10
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0500	0.0530	ppm(v/v)	106		EPA-21 TO-14A
	0.0500	0.0526	ppm(v/v)	105	0.73	EPA-21 TO-14A
Methylene chloride	0.0500	0.0497	ppm(v/v)	99		EPA-21 TO-14A
	0.0500	0.0489	ppm(v/v)	98	1.7	EPA-21 TO-14A
Trichloroethene	0.0500	0.0513	ppm(v/v)	103		EPA-21 TO-14A
	0.0500	0.0511	ppm(v/v)	102	0.35	EPA-21 TO-14A
Toluene	0.0500	0.0534	ppm(v/v)	107		EPA-21 TO-14A
	0.0500	0.0536	ppm(v/v)	107	0.46	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0500	0.0530	ppm(v/v)	106		EPA-21 TO-14A
	0.0500	0.0536	ppm(v/v)	107	1.2	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 SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

April 24, 2002

STL LOT NUMBER: E2D100315
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on April 10, 2002. This sample is associated with your BRC former C-6 facility, Torrance, California project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. Please note that the samples for TO-14A were received in Tedlar Bags. Summa Canisters are the appropriate sample collection media for this method. The use of Tedlar Bags is a modification of the method.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager

CC: Project File

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0003586

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client: HALEY & ALDRICH	Project Manager: SCOTT ZACHARY	Date: 4/10/02	Chain of Custody Number: 050906
Address: 9040 FRIARS RD, SUITE 220	Telephone Number (Area Code)/Fax Number: 619-280-9210	Lab Number: E2D100315	Page 01 of 01
City: SAN DIEGO; State: CA; Zip Code: 92103	Site Contact: TRAVIS HAMMONS	Lab Contact:	
Project Name and Location (State): CG LOS ANGELES	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 28335-002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TO-14	Special Instructions/ Conditions of Receipt
GAC0002E_AV041002_0001	4/10/02	15:00	X				1						X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other_____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 4/10/02	Time: 19:00	1. Received By: [signature]	Date: 4/10/02	Time: 19:00
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

000002

BOE-C6-0003587

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 4/10/02

Quantims Lot #: E2D100315
Quote #: 42295
Client Name: Haley & Aldrich
Project: BOEING C-6
Received by: [illegible]
Date/Time Received: 4/10/02 19:00
Delivered by : ☒Client ☐Airborne ☐Fed Ex ☐DHL ☐In-House Courier ☐Rey B. ☐UPS ☐DES ☐Other _____

****

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☒None ..... DR 4/10/02
Custody Seal #(s): _____ ☒No Seal # ..... _____
Sample Container(s): ☐STL-LA ☐Client ☐N/A ..... _____
Temperature(s) (Cooler/blank) in °C: N/A Correction factor -0.1°C (Corrected Temp.) ___ ... _____
Thermometer Used : ID: B ☒IR (Infra-red) ☐Digital (Probe) ..... _____
Samples: ☒Intact ☐Broken ☐Other _____ ..... _____
Anomalies: ☒No ☐Yes (See Clouseau) ..... _____
Labeled by ..... DR _____
Labeling checked by ..... _____

****

Turn Around Time: ☐RUSH-24HR ☐RUSH-48HR ☐RUSH-72HR ☒NORMAL ..... _____
Short-Hold Notification: ☐Ph ☐Wet Chem ☐Metals (Filter/Pres) ☐Encore ☒N/A ... TB!
Outside Analysis(es) (Test/Lab/Date Sent Out) : None.

_____ ..... _____
_____ ..... _____
_____ ..... _____
_____ ..... _____

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1.										PH
VOAh 1*											N/A
3L TB	1										

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: [illegible] 4/10/02 REVIEWED BY/DATE: [illegible] 4/10/02

PRC Ver. 8 081401 KRF
QANACA01\N:\Precis\Sample Control Forms

000003

BOE-C6-0003588

SEVERN TRENT SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E2D100315

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002E_AV041002_0001 04/10/02 15:00 001				
Bromomethane	0.0011 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0044 J	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0039 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0014 J	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	0.00071 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.00091 J	0.010	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2D100315

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2D100315

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EXPHX	001	GAC0002E_AV041002_0001	04/10/02	15:00

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV041002_0001

GC/MS Volatiles

Lot-Sample #...: E2D100315-001 **Work Order #...:** EXPHX1AA **Matrix.....:** AIR
Date Sampled...: 04/10/02 15:00 **Date Received..:** 04/10/02 19:00 **MS Run #.....:**
Prep Date.....: 04/11/02 **Analysis Date..:** 04/11/02
Prep Batch #...: 2102475 **Analysis Time..:** 23:11
Dilution Factor: 1
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	ND	0.50	ppm(v/v)	0.10
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	0.00050
Chloromethane	ND	0.0040	ppm(v/v)	0.0010
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
Bromomethane	**0.0011 J**	**0.0020**	**ppm(v/v)**	**0.0010**
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
Acetone	**0.0044 J**	**0.010**	**ppm(v/v)**	**0.0020**
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
2-Butanone (MEK)	ND	0.010	ppm(v/v)	0.0020
Chloroform	ND	0.0020	ppm(v/v)	0.00080
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Benzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
Trichloroethene	ND	0.0020	ppm(v/v)	0.00060
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Toluene	**0.0039 J**	**0.0050**	**ppm(v/v)**	**0.00050**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00050
2-Hexanone	ND	0.030	ppm(v/v)	0.0010

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV041002_0001

GC/MS Volatiles

Lot-Sample #...: E2D100315-001 Work Order #...: EXPHX1AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Ethylbenzene	ND	0.0020	ppm(v/v)	0.00050
Xylenes (total)	**0.0014 J**	**0.0020**	**ppm(v/v)**	**0.00080**
Styrene	ND	0.0020	ppm(v/v)	0.00060
Bromoform	ND	0.0020	ppm(v/v)	0.00050
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
4-Ethyltoluene	ND	0.0020	ppm(v/v)	0.00070
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trimethylbenzene	**0.00071 J**	**0.0020**	**ppm(v/v)**	**0.00050**
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00060
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	0.00060
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010
Methyl tert-butyl ether (MTBE)	**0.00091 J**	**0.010**	**ppm(v/v)**	**0.00050**

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV041002_0001

GC/MS Volatiles

Lot-Sample #: E2D100315-001 **Work Order #:** EXPHX1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Propane	74-98-6	0.014	M	2.1654	ppm(v/v)
Unknown hydrocarbon		0.0063	M	8.7275	ppm(v/v)
Unknown hydrocarbon		0.0081	M	21.337	ppm(v/v)

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

SEVERN
TRENT
SERVICES

QA/QC

000011

QC DATA ASSOCIATION SUMMARY

E2D100315

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2102475	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D100315
MB Lot-Sample #: M2D120000-475
Work Order #...: EXVJ11AA
Matrix.....: AIR
Prep Date.....: 04/11/02
Analysis Time..: 19:46
Analysis Date..: 04/11/02
Prep Batch #...: 2102475
Instrument ID..: MSB
Dilution Factor: 1
Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D100315 Work Order #...: EXVJ11AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2D100315 Work Order #...: EXVJ11AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2D120000-475 EXVJ11AD-LCSD
Prep Date.....: 04/11/02 Analysis Date..: 04/11/02
Prep Batch #...: 2102475 Analysis Time..: 17:56
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	98	(70 - 125)			EPA-21 TO-14A
	97	(70 - 125)	1.0	(0-20)	EPA-21 TO-14A
Methylene chloride	90	(75 - 120)			EPA-21 TO-14A
	91	(75 - 120)	0.32	(0-20)	EPA-21 TO-14A
Trichloroethene	93	(80 - 125)			EPA-21 TO-14A
	87	(80 - 125)	7.3	(0-20)	EPA-21 TO-14A
Toluene	96	(70 - 120)			EPA-21 TO-14A
	96	(70 - 120)	0.11	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	89	(70 - 130)			EPA-21 TO-14A
	97	(70 - 130)	8.7	(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 #...: E2D100315 Work Order #...: EXVJ11AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2D120000-475 EXVJ11AD-LCSD
Prep Date.....: 04/11/02 Analysis Date..: 04/11/02
Prep Batch #...: 2102475 Analysis Time..: 17:56
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0580	ppm(v/v)	98		EPA-21 TO-14A
	0.0592	0.0574	ppm(v/v)	97	1.0	EPA-21 TO-14A
Methylene chloride	0.0587	0.0531	ppm(v/v)	90		EPA-21 TO-14A
	0.0587	0.0533	ppm(v/v)	91	0.32	EPA-21 TO-14A
Trichloroethene	0.0594	0.0553	ppm(v/v)	93		EPA-21 TO-14A
	0.0594	0.0514	ppm(v/v)	87	7.3	EPA-21 TO-14A
Toluene	0.0557	0.0532	ppm(v/v)	96		EPA-21 TO-14A
	0.0557	0.0533	ppm(v/v)	96	0.11	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0494	ppm(v/v)	89		EPA-21 TO-14A
	0.0554	0.0539	ppm(v/v)	97	8.7	EPA-21 TO-14A

NOTE(S):

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

Bold print denotes control parameters

ANALYTICAL REPORT

BRC C-6, Torrance HaleyAldrich

Lot #: E2D170317

Scott Zachary

Haley & Aldrich Inc

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

April 22, 2002

EXECUTIVE SUMMARY - Detection Highlights

E2D170317

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002E_AV041702_0001 04/17/02 15:35 001				
Total Non-Methane Hydrocarbons	3.1	2.5	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.086	0.010	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.032	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.0054 J	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.015	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.0049 J	0.010	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	1.1	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0063 J	0.025	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.017	0.010	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0055 J	0.010	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.0099 J	0.050	ppm(v/v)	EPA-21 TO-14A
GAC0002C_AV041702_0001 04/17/02 15:47 002				
Total Non-Methane Hydrocarbons	5.6	5.0	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.021	0.020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.12	0.020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	2.7	0.020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	0.011 J	0.020	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.049	0.020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.080	0.020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.0085 J	0.020	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.13	0.020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.025	0.020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.84	0.020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0067 J	0.050	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.016 J	0.020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.0091 J	0.10	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2D170317

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2D170317

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EX3E9	001	GAC0002E_AV041702_0001	04/17/02	15:35
EX3FA	002	GAC0002C_AV041702_0001	04/17/02	15:47

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV041702_0001

GC/MS Volatiles

Lot-Sample #...: E2D170317-001 **Work Order #...:** EX3E91AA **Matrix.....:** AIR
Date Sampled...: 04/17/02 15:35 **Date Received..:** 04/17/02 17:20 **MS Run #.....:**
Prep Date.....: 04/18/02 **Analysis Date..:** 04/18/02
Prep Batch #...: 2109530 **Analysis Time..:** 16:59
Dilution Factor: 5
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**3.1**	**2.5**	**ppm(v/v)**	**0.50**
Dichlorodifluoromethane	**0.086**	**0.010**	**ppm(v/v)**	**0.0025**
Chloromethane	ND	0.020	ppm(v/v)	0.0050
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.010	ppm(v/v)	0.0040
Vinyl chloride	ND	0.010	ppm(v/v)	0.0040
Bromomethane	ND	0.010	ppm(v/v)	0.0050
Chloroethane	ND	0.020	ppm(v/v)	0.0040
Trichlorofluoromethane	ND	0.010	ppm(v/v)	0.0025
1,1-Dichloroethene	**0.032**	**0.010**	**ppm(v/v)**	**0.0025**
Carbon disulfide	ND	0.050	ppm(v/v)	0.010
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.010	ppm(v/v)	0.0025
Acetone	ND	0.050	ppm(v/v)	0.010
Methylene chloride	**0.0054 J**	**0.010**	**ppm(v/v)**	**0.0040**
trans-1,2-Dichloroethene	ND	0.010	ppm(v/v)	0.0025
1,1-Dichloroethane	ND	0.010	ppm(v/v)	0.0025
Vinyl acetate	ND	0.050	ppm(v/v)	0.010
cis-1,2-Dichloroethene	ND	0.010	ppm(v/v)	0.0040
2-Butanone (MEK)	ND	0.050	ppm(v/v)	0.010
Chloroform	**0.015**	**0.010**	**ppm(v/v)**	**0.0040**
1,1,1-Trichloroethane	**0.0049 J**	**0.010**	**ppm(v/v)**	**0.0025**
Carbon tetrachloride	ND	0.010	ppm(v/v)	0.0025
Benzene	ND	0.010	ppm(v/v)	0.0040
1,2-Dichloroethane	ND	0.010	ppm(v/v)	0.0040
Trichloroethene	**1.1**	**0.010**	**ppm(v/v)**	**0.0030**
1,2-Dichloropropane	ND	0.010	ppm(v/v)	0.0040
Bromodichloromethane	ND	0.010	ppm(v/v)	0.0040
cis-1,3-Dichloropropene	ND	0.010	ppm(v/v)	0.0025
4-Methyl-2-pentanone (MIBK)	ND	0.050	ppm(v/v)	0.010
Toluene	**0.0063 J**	**0.025**	**ppm(v/v)**	**0.0025**
trans-1,3-Dichloropropene	ND	0.010	ppm(v/v)	0.0040
1,1,2-Trichloroethane	ND	0.010	ppm(v/v)	0.0030
Tetrachloroethene	**0.017**	**0.010**	**ppm(v/v)**	**0.0025**
2-Hexanone	ND	0.15	ppm(v/v)	0.0050

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV041702_0001

GC/MS Volatiles

Lot-Sample #...: E2D170317-001 **Work Order #...:** EX3E91AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.010	ppm(v/v)	0.0025
1,2-Dibromoethane (EDB)	ND	0.010	ppm(v/v)	0.0025
Chlorobenzene	ND	0.010	ppm(v/v)	0.0025
Ethylbenzene	ND	0.010	ppm(v/v)	0.0025
Xylenes (total)	**0.0055 J**	**0.010**	**ppm(v/v)**	**0.0040**
Styrene	ND	0.010	ppm(v/v)	0.0030
Bromoform	ND	0.010	ppm(v/v)	0.0025
1,1,2,2-Tetrachloroethane	ND	0.010	ppm(v/v)	0.0025
Benzyl chloride	ND	0.050	ppm(v/v)	0.0040
4-Ethyltoluene	ND	0.010	ppm(v/v)	0.0035
1,3,5-Trimethylbenzene	ND	0.010	ppm(v/v)	0.0040
1,2,4-Trimethylbenzene	ND	0.010	ppm(v/v)	0.0025
1,3-Dichlorobenzene	ND	0.010	ppm(v/v)	0.0030
1,4-Dichlorobenzene	ND	0.010	ppm(v/v)	0.0040
1,2-Dichlorobenzene	ND	0.010	ppm(v/v)	0.0040
1,2,4-Trichloro-benzene	ND	0.10	ppm(v/v)	0.0030
Hexachlorobutadiene	ND	0.020	ppm(v/v)	0.0050
Methyl tert-butyl ether (MTBE)	**0.0099 J**	**0.050**	**ppm(v/v)**	**0.0025**

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV041702_0001

GC/MS Volatiles

Lot-Sample #: E2D170317-001 **Work Order #:** EX3E91AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Isobutane	75-28-5	0.029	M	2.4441	ppm(v/v)
Unknown halogenated hydrocarbo		0.029	M	2.4441	ppm(v/v)

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Client Sample ID: GAC0002C_AV041702_0001

GC/MS Volatiles

Lot-Sample #...: E2D170317-002 **Work Order #...:** EX3FA1AA **Matrix.....:** AIR
Date Sampled...: 04/17/02 15:47 **Date Received..:** 04/17/02 17:20 **MS Run #.....:**
Prep Date.....: 04/18/02 **Analysis Date..:** 04/18/02
Prep Batch #...: 2109530 **Analysis Time..:** 17:33
Dilution Factor: 10
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**5.6**	**5.0**	**ppm(v/v)**	**1.0**
Dichlorodifluoromethane	**0.021**	**0.020**	**ppm(v/v)**	**0.0050**
Chloromethane	ND	0.040	ppm(v/v)	0.010
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.020	ppm(v/v)	0.0080
Vinyl chloride	ND	0.020	ppm(v/v)	0.0080
Bromomethane	ND	0.020	ppm(v/v)	0.010
Chloroethane	ND	0.040	ppm(v/v)	0.0080
Trichlorofluoromethane	**0.12**	**0.020**	**ppm(v/v)**	**0.0050**
1,1-Dichloroethene	**2.7**	**0.020**	**ppm(v/v)**	**0.0050**
Carbon disulfide	ND	0.10	ppm(v/v)	0.020
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.011 J**	**0.020**	**ppm(v/v)**	**0.0050**
Acetone	ND	0.10	ppm(v/v)	0.020
Methylene chloride	**0.049**	**0.020**	**ppm(v/v)**	**0.0080**
trans-1,2-Dichloroethene	ND	0.020	ppm(v/v)	0.0050
1,1-Dichloroethane	**0.080**	**0.020**	**ppm(v/v)**	**0.0050**
Vinyl acetate	ND	0.10	ppm(v/v)	0.020
cis-1,2-Dichloroethene	**0.0085 J**	**0.020**	**ppm(v/v)**	**0.0080**
2-Butanone (MEK)	ND	0.10	ppm(v/v)	0.020
Chloroform	**0.13**	**0.020**	**ppm(v/v)**	**0.0080**
1,1,1-Trichloroethane	**0.025**	**0.020**	**ppm(v/v)**	**0.0050**
Carbon tetrachloride	ND	0.020	ppm(v/v)	0.0050
Benzene	ND	0.020	ppm(v/v)	0.0080
1,2-Dichloroethane	ND	0.020	ppm(v/v)	0.0080
Trichloroethene	**0.84**	**0.020**	**ppm(v/v)**	**0.0060**
1,2-Dichloropropane	ND	0.020	ppm(v/v)	0.0080
Bromodichloromethane	ND	0.020	ppm(v/v)	0.0080
cis-1,3-Dichloropropene	ND	0.020	ppm(v/v)	0.0050
4-Methyl-2-pentanone (MIBK)	ND	0.10	ppm(v/v)	0.020
Toluene	**0.0067 J**	**0.050**	**ppm(v/v)**	**0.0050**
trans-1,3-Dichloropropene	ND	0.020	ppm(v/v)	0.0080
1,1,2-Trichloroethane	ND	0.020	ppm(v/v)	0.0060
Tetrachloroethene	**0.016 J**	**0.020**	**ppm(v/v)**	**0.0050**
2-Hexanone	ND	0.30	ppm(v/v)	0.010

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002C_AV041702_0001

GC/MS Volatiles

Lot-Sample #...: E2D170317-002 **Work Order #...:** EX3FA1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.020	ppm(v/v)	0.0050
1,2-Dibromoethane (EDB)	ND	0.020	ppm(v/v)	0.0050
Chlorobenzene	ND	0.020	ppm(v/v)	0.0050
Ethylbenzene	ND	0.020	ppm(v/v)	0.0050
Xylenes (total)	ND	0.020	ppm(v/v)	0.0080
Styrene	ND	0.020	ppm(v/v)	0.0060
Bromoform	ND	0.020	ppm(v/v)	0.0050
1,1,2,2-Tetrachloroethane	ND	0.020	ppm(v/v)	0.0050
Benzyl chloride	ND	0.10	ppm(v/v)	0.0080
4-Ethyltoluene	ND	0.020	ppm(v/v)	0.0070
1,3,5-Trimethylbenzene	ND	0.020	ppm(v/v)	0.0080
1,2,4-Trimethylbenzene	ND	0.020	ppm(v/v)	0.0050
1,3-Dichlorobenzene	ND	0.020	ppm(v/v)	0.0060
1,4-Dichlorobenzene	ND	0.020	ppm(v/v)	0.0080
1,2-Dichlorobenzene	ND	0.020	ppm(v/v)	0.0080
1,2,4-Trichloro-benzene	ND	0.20	ppm(v/v)	0.0060
Hexachlorobutadiene	ND	0.040	ppm(v/v)	0.010
Methyl tert-butyl ether (MTBE)	**0.0091 J**	**0.10**	**ppm(v/v)**	**0.0050**

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002C_AV041702_0001

GC/MS Volatiles

Lot-Sample #: E2D170317-002 **Work Order #:** EX3FA1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

QC DATA ASSOCIATION SUMMARY

E2D170317

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2109530	
002	AIR	EPA-21 TO-14A		2109530	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D170317 **Work Order #...:** EX70V1AA **Matrix.....:** AIR
MB Lot-Sample #: M2D190000-530

Prep Date.....: 04/18/02 **Analysis Time..:** 15:19
Analysis Date..: 04/18/02 **Prep Batch #...:** 2109530 **Instrument ID..:** MSB
Dilution Factor: 1

Analyst ID.....: 007319

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D170317 **Work Order #...:** EX70V1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2D170317 Work Order #...: EX70V1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2D190000-530 EX70V1AD-LCSD
Prep Date.....: 04/18/02 Analysis Date..: 04/18/02
Prep Batch #...: 2109530 Analysis Time..: 14:10
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 007319

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	92	(70 - 125)			EPA-21 TO-14A
	91	(70 - 125)	0.82	(0-20)	EPA-21 TO-14A
Methylene chloride	91	(75 - 120)			EPA-21 TO-14A
	88	(75 - 120)	3.8	(0-20)	EPA-21 TO-14A
Trichloroethene	86	(80 - 125)			EPA-21 TO-14A
	86	(80 - 125)	0.13	(0-20)	EPA-21 TO-14A
Toluene	92	(70 - 120)			EPA-21 TO-14A
	93	(70 - 120)	1.7	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	90	(70 - 130)			EPA-21 TO-14A
	92	(70 - 130)	2.6	(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 #...: E2D170317 Work Order #...: EX70V1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2D190000-530 EX70V1AD-LCSD
Prep Date.....: 04/18/02 Analysis Date..: 04/18/02
Prep Batch #...: 2109530 Analysis Time..: 14:10
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 007319

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0545	ppm(v/v)	92		EPA-21 TO-14A
	0.0592	0.0541	ppm(v/v)	91	0.82	EPA-21 TO-14A
Methylene chloride	0.0587	0.0537	ppm(v/v)	91		EPA-21 TO-14A
	0.0587	0.0517	ppm(v/v)	88	3.8	EPA-21 TO-14A
Trichloroethene	0.0594	0.0513	ppm(v/v)	86		EPA-21 TO-14A
	0.0594	0.0512	ppm(v/v)	86	0.13	EPA-21 TO-14A
Toluene	0.0557	0.0510	ppm(v/v)	92		EPA-21 TO-14A
	0.0557	0.0519	ppm(v/v)	93	1.7	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0499	ppm(v/v)	90		EPA-21 TO-14A
	0.0554	0.0512	ppm(v/v)	92	2.6	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
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

April 25, 2002

STL LOT NUMBER: E2D230261
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on April 23, 2002. This sample is associated with your BRC former C-6 facility, Torrance, California project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Any matrix related anomaly is footnoted within the report. Please note that the samples for TO-14A were received in Tedlar Bags. Summa Canisters are the appropriate sample collection media for this method. The use of Tedlar Bags is a modification of the method.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager

CC: Project File

Page 1 of 000016 total pages in this report.

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0003617

Chain of Custody Record

SEVERN TRENT SERVICES **Severn Trent Laboratories, Inc.**

STL-4124 (0700)

Client: Haley + Aldrich	Project Manager: Rich Farson	Date: 4/23/02	Chain of Custody Number: 049868
Address: 9040 Friars Rd Suite 220	Telephone Number (Area Code)/Fax Number: 619. 285.7127	Lab Number: E2D230261	Page ____ of ____
City: San Diego; State: CA; Zip Code: 92108	Site Contact:	Lab Contact:	
Project Name and Location (State): Boeing C6	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Tedlar Bag	Analysis (Attach list if more space is needed): TO-14	Special Instructions/ Conditions of Receipt
GAC0002E_AV042302_0001	4/23/02	16:25	X											X	X	

200002

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Normal

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 4/23/02	Time: 8:50	1. Received By: [signature]	Date: 4/23/02	Time: 8:50
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0003618

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 4/23/02

Quantims Lot #: E2D230261
Quote #: 42295
Client Name: Haley & Aldrich
Project: Boeing C6
Received by: Pecolt
Date/Time Received: 4/23/02 8:50pm
Delivered by : [X] Client [ ] Airborne [ ] Fed Ex [ ] DHL [ ] In-House Courier [ ] Rey B. [ ] UPS [ ] DES [ ] Other

****

Initial / Date

Custody Seal Status: [ ] Intact [ ] Broken [X] None ..... AR 4/23/02
Custody Seal #(s): [X] No Seal # .....
Sample Container(s): [ ] STL-LA [ ] Client [ ] N/A .....
Temperature(s) (Cooler/blank) in °C: 14A Correction factor -0.1°C (Corrected Temp.) ...
Thermometer Used : ID: B [X] IR (Infra-red) [ ] Digital (Probe) .....
Samples: [X] Intact [ ] Broken [ ] Other .....
Anomalies: [X] No [ ] Yes (See Clouseau) .....
Labeled by ..... AR .....
Labeling checked by .....

****

Turn Around Time: [ ] RUSH-24HR [ ] RUSH-48HR [ ] RUSH-72HR [X] NORMAL 3days
Short-Hold Notification: [ ] Ph [ ] Wet Chem [ ] Metals (Filter/Pres) [ ] Encore [ ] N/A ... 3days
Outside Analysis(es) (Test/Lab/Date Sent Out) : none

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1										PH
VOAh /*											N/A
1LTB	1										—

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Pecolt 4/23/02 REVIEWED BY/DATE: [signature] 4/23/02

PRC Ver. 6 081401 KRF QANACA01\N:\Precis\Sample Control Forms

000003

SEVERN TRENT SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E2D230261

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002E_AV042302_0001 04/23/02 16:25 001				
Total Non-Methane Hydrocarbons	1.4	1.2	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.015	0.0050	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.16	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.78	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0055	0.0050	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.063	0.0050	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.0073	0.0050	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0041 J	0.012	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0039 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.0013 J	0.025	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2D230261

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2D230261

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E0A9P	001	GAC0002E_AV042302_0001	04/23/02	16:25

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV042302_0001

GC/MS Volatiles

Lot-Sample #...:	E2D230261-001	**Work Order #...:**	E0A9P1AA	**Matrix.....:**	AIR
Date Sampled...:	04/23/02 16:25	**Date Received..:**	04/23/02 20:50	**MS Run #.....:**	
Prep Date.....:	04/24/02	**Analysis Date..:**	04/24/02		
Prep Batch #...:	2115268	**Analysis Time..:**	13:23		
Dilution Factor:	2.5				
Analyst ID.....:	117751	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**1.4**	**1.2**	**ppm(v/v)**	**0.25**
Dichlorodifluoromethane	**0.015**	**0.0050**	**ppm(v/v)**	**0.0012**
Chloromethane	ND	0.010	ppm(v/v)	0.0025
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0050	ppm(v/v)	0.0020
Vinyl chloride	ND	0.0050	ppm(v/v)	0.0020
Bromomethane	ND	0.0050	ppm(v/v)	0.0025
Chloroethane	ND	0.010	ppm(v/v)	0.0020
Trichlorofluoromethane	**0.16**	**0.0050**	**ppm(v/v)**	**0.0012**
1,1-Dichloroethene	**0.78**	**0.0050**	**ppm(v/v)**	**0.0012**
Carbon disulfide	ND	0.025	ppm(v/v)	0.0050
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.0055**	**0.0050**	**ppm(v/v)**	**0.0012**
Acetone	ND	0.025	ppm(v/v)	0.0050
Methylene chloride	**0.063**	**0.0050**	**ppm(v/v)**	**0.0020**
trans-1,2-Dichloroethene	ND	0.0050	ppm(v/v)	0.0012
1,1-Dichloroethane	**0.0073**	**0.0050**	**ppm(v/v)**	**0.0012**
Vinyl acetate	ND	0.025	ppm(v/v)	0.0050
cis-1,2-Dichloroethene	ND	0.0050	ppm(v/v)	0.0020
2-Butanone (MEK)	ND	0.025	ppm(v/v)	0.0050
Chloroform	ND	0.0050	ppm(v/v)	0.0020
1,1,1-Trichloroethane	ND	0.0050	ppm(v/v)	0.0012
Carbon tetrachloride	ND	0.0050	ppm(v/v)	0.0012
Benzene	ND	0.0050	ppm(v/v)	0.0020
1,2-Dichloroethane	ND	0.0050	ppm(v/v)	0.0020
Trichloroethene	ND	0.0050	ppm(v/v)	0.0015
1,2-Dichloropropane	ND	0.0050	ppm(v/v)	0.0020
Bromodichloromethane	ND	0.0050	ppm(v/v)	0.0020
cis-1,3-Dichloropropene	ND	0.0050	ppm(v/v)	0.0012
4-Methyl-2-pentanone (MIBK)	ND	0.025	ppm(v/v)	0.0050
Toluene	**0.0041 J**	**0.012**	**ppm(v/v)**	**0.0012**
trans-1,3-Dichloropropene	ND	0.0050	ppm(v/v)	0.0020
1,1,2-Trichloroethane	ND	0.0050	ppm(v/v)	0.0015
Tetrachloroethene	ND	0.0050	ppm(v/v)	0.0012
2-Hexanone	ND	0.075	ppm(v/v)	0.0025

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV042302_0001

GC/MS Volatiles

Lot-Sample #...: E2D230261-001 Work Order #...: E0A9P1AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.0050	ppm(v/v)	0.0012
1,2-Dibromoethane (EDB)	ND	0.0050	ppm(v/v)	0.0012
Chlorobenzene	ND	0.0050	ppm(v/v)	0.0012
Ethylbenzene	ND	0.0050	ppm(v/v)	0.0012
Xylenes (total)	**0.0039 J**	**0.0050**	**ppm(v/v)**	**0.0020**
Styrene	ND	0.0050	ppm(v/v)	0.0015
Bromoform	ND	0.0050	ppm(v/v)	0.0012
1,1,2,2-Tetrachloroethane	ND	0.0050	ppm(v/v)	0.0012
Benzyl chloride	ND	0.025	ppm(v/v)	0.0020
4-Ethyltoluene	ND	0.0050	ppm(v/v)	0.0018
1,3,5-Trimethylbenzene	ND	0.0050	ppm(v/v)	0.0020
1,2,4-Trimethylbenzene	ND	0.0050	ppm(v/v)	0.0012
1,3-Dichlorobenzene	ND	0.0050	ppm(v/v)	0.0015
1,4-Dichlorobenzene	ND	0.0050	ppm(v/v)	0.0020
1,2-Dichlorobenzene	ND	0.0050	ppm(v/v)	0.0020
1,2,4-Trichloro-benzene	ND	0.050	ppm(v/v)	0.0015
Hexachlorobutadiene	ND	0.010	ppm(v/v)	0.0025
Methyl tert-butyl ether (MTBE)	**0.0013 J**	**0.025**	**ppm(v/v)**	**0.0012**

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV042302_0001

GC/MS Volatiles

Lot-Sample #: E2D230261-001 **Work Order #:** E0A9P1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
isobutane	75-28-5	0.038	M	2.4545	ppm(v/v)
unknown hydrocarbon		0.014	M	2.662	ppm(v/v)
unknown branched alkane		0.023	M	2.8064	ppm(v/v)

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

SEVERN
TRENT
SERVICES

QA/QC

000011

QC DATA ASSOCIATION SUMMARY

E2D230261

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2115268	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D230261
MB Lot-Sample #: M2D250000-268

Analysis Date..: 04/24/02
Dilution Factor: 1

Work Order #...: E0EP71AA

Prep Date.....: 04/24/02
Prep Batch #...: 2115268

Analyst ID.....: 117751

Matrix.....: AIR

Analysis Time..: 09:13
Instrument ID..: MSB

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D230261 **Work Order #...:** E0EP71AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2D230261
LCS Lot-Sample#: M2D250000-268
Prep Date.....: 04/24/02
Prep Batch #...: 2115268
Dilution Factor: 1
Analyst ID.....: 117751

Work Order #...: E0EP71AC-LCS
E0EP71AD-LCSD
Analysis Date..: 04/24/02
Analysis Time..: 08:13
Instrument ID..: MSB

Matrix.....: AIR

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	92	(70 - 125)			EPA-21 TO-14A
	94	(70 - 125)	2.4	(0-20)	EPA-21 TO-14A
Methylene chloride	87	(75 - 120)			EPA-21 TO-14A
	88	(75 - 120)	1.5	(0-20)	EPA-21 TO-14A
Trichloroethene	89	(80 - 125)			EPA-21 TO-14A
	86	(80 - 125)	2.9	(0-20)	EPA-21 TO-14A
Toluene	93	(70 - 120)			EPA-21 TO-14A
	93	(70 - 120)	0.86	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	81	(70 - 130)			EPA-21 TO-14A
	85	(70 - 130)	5.6	(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 #...: E2D230261 Work Order #...: E0EP71AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2D250000-268 E0EP71AD-LCSD
Prep Date.....: 04/24/02 Analysis Date..: 04/24/02
Prep Batch #...: 2115268 Analysis Time..: 08:13
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0546	ppm(v/v)	92		EPA-21 TO-14A
	0.0592	0.0559	ppm(v/v)	94	2.4	EPA-21 TO-14A
Methylene chloride	0.0587	0.0508	ppm(v/v)	87		EPA-21 TO-14A
	0.0587	0.0516	ppm(v/v)	88	1.5	EPA-21 TO-14A
Trichloroethene	0.0594	0.0528	ppm(v/v)	89		EPA-21 TO-14A
	0.0594	0.0513	ppm(v/v)	86	2.9	EPA-21 TO-14A
Toluene	0.0557	0.0516	ppm(v/v)	93		EPA-21 TO-14A
	0.0557	0.0520	ppm(v/v)	93	0.86	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0447	ppm(v/v)	81		EPA-21 TO-14A
	0.0554	0.0473	ppm(v/v)	85	5.6	EPA-21 TO-14A

NOTE(S):

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

Bold print denotes control parameters

ANALYTICAL REPORT

BRC C-6, Torrance HaleyAldrich

Lot #: E2E030308

Scott Zachary

Haley & Aldrich Inc

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

May 6, 2002

EXECUTIVE SUMMARY - Detection Highlights

E2E030308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002E_AV050302_0001 05/03/02 12:07 001				
Chloromethane	0.0090	0.0040	ppm(v/v)	EPA-21 TO-14A
Acetone	0.0033 J	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0020 J	0.0050	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.0011 J	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	0.00051 J	0.010	ppm(v/v)	EPA-21 TO-14A
GAC0002U_AV050302_0001 05/03/02 12:17 002				
Total Non-Methane Hydrocarbons	36	25	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.044 J	0.10	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.6	0.10	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.057 J	0.10	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.063 J	0.10	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.36	0.10	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.15	0.10	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	13	0.10	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.19	0.10	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2E030308

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2E030308

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E0W31	001	GAC0002E_AV050302_0001	05/03/02	12:07
E0W36	002	GAC0002U_AV050302_0001	05/03/02	12:17

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV050302_0001

GC/MS Volatiles

Lot-Sample #...: E2E030308-001 **Work Order #...:** E0W311AA **Matrix.....:** AIR
Date Sampled...: 05/03/02 12:07 **Date Received..:** 05/03/02 14:00 **MS Run #.....:**
Prep Date.....: 05/03/02 **Analysis Date..:** 05/03/02
Prep Batch #...: 2126284 **Analysis Time..:** 17:41
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	ND	0.50	ppm(v/v)	0.10
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	0.00050
Chloromethane	**0.0090**	**0.0040**	**ppm(v/v)**	**0.0010**
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	0.00080
Vinyl chloride	ND	0.0020	ppm(v/v)	0.00080
Bromomethane	ND	0.0020	ppm(v/v)	0.0010
Chloroethane	ND	0.0040	ppm(v/v)	0.00080
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
Carbon disulfide	ND	0.010	ppm(v/v)	0.0020
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	0.00050
Acetone	**0.0033 J**	**0.010**	**ppm(v/v)**	**0.0020**
Methylene chloride	ND	0.0020	ppm(v/v)	0.00080
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00050
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	0.00050
Vinyl acetate	ND	0.010	ppm(v/v)	0.0020
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	0.00080
2-Butanone (MEK)	ND	0.010	ppm(v/v)	0.0020
Chloroform	ND	0.0020	ppm(v/v)	0.00080
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	0.00050
Carbon tetrachloride	ND	0.0020	ppm(v/v)	0.00050
Benzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	0.00080
Trichloroethene	ND	0.0020	ppm(v/v)	0.00060
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	0.00080
Bromodichloromethane	ND	0.0020	ppm(v/v)	0.00080
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00050
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	0.0020
Toluene	**0.0020 J**	**0.0050**	**ppm(v/v)**	**0.00050**
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	0.00080
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	0.00060
Tetrachloroethene	ND	0.0020	ppm(v/v)	0.00050
2-Hexanone	ND	0.030	ppm(v/v)	0.0010

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV050302_0001

GC/MS Volatiles

Lot-Sample #...: E2E030308-001 **Work Order #...:** E0W311AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.0020	ppm(v/v)	0.00050
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	0.00050
Chlorobenzene	ND	0.0020	ppm(v/v)	0.00050
Ethylbenzene	ND	0.0020	ppm(v/v)	0.00050
Xylenes (total)	**0.0011 J**	**0.0020**	**ppm(v/v)**	**0.00080**
Styrene	ND	0.0020	ppm(v/v)	0.00060
Bromoform	ND	0.0020	ppm(v/v)	0.00050
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	0.00050
Benzyl chloride	ND	0.010	ppm(v/v)	0.00080
4-Ethyltoluene	ND	0.0020	ppm(v/v)	0.00070
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	0.00050
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00060
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	0.00080
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	0.00060
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	0.0010
Methyl tert-butyl ether (MTBE)	**0.00051 J**	**0.010**	**ppm(v/v)**	**0.00050**

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV050302_0001

GC/MS Volatiles

Lot-Sample #: E2E030308-001 **Work Order #:** E0W311AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: GAC0002U_AV050302_0001

GC/MS Volatiles

Lot-Sample #...: E2E030308-002 **Work Order #...:** E0W361AA **Matrix.....:** AIR
Date Sampled...: 05/03/02 12:17 **Date Received..:** 05/03/02 14:00 **MS Run #.....:**
Prep Date.....: 05/03/02 **Analysis Date..:** 05/03/02
Prep Batch #...: 2126284 **Analysis Time..:** 18:15
Dilution Factor: 50
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**36**	**25**	**ppm(v/v)**	**5.0**
Dichlorodifluoromethane	ND	0.10	ppm(v/v)	0.025
Chloromethane	ND	0.20	ppm(v/v)	0.050
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.10	ppm(v/v)	0.040
Vinyl chloride	ND	0.10	ppm(v/v)	0.040
Bromomethane	ND	0.10	ppm(v/v)	0.050
Chloroethane	ND	0.20	ppm(v/v)	0.040
Trichlorofluoromethane	**0.044 J**	**0.10**	**ppm(v/v)**	**0.025**
1,1-Dichloroethene	**1.6**	**0.10**	**ppm(v/v)**	**0.025**
Carbon disulfide	ND	0.50	ppm(v/v)	0.10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.10	ppm(v/v)	0.025
Acetone	ND	0.50	ppm(v/v)	0.10
Methylene chloride	ND	0.10	ppm(v/v)	0.040
trans-1,2-Dichloroethene	ND	0.10	ppm(v/v)	0.025
1,1-Dichloroethane	**0.057 J**	**0.10**	**ppm(v/v)**	**0.025**
Vinyl acetate	ND	0.50	ppm(v/v)	0.10
cis-1,2-Dichloroethene	**0.063 J**	**0.10**	**ppm(v/v)**	**0.040**
2-Butanone (MEK)	ND	0.50	ppm(v/v)	0.10
Chloroform	**0.36**	**0.10**	**ppm(v/v)**	**0.040**
1,1,1-Trichloroethane	**0.15**	**0.10**	**ppm(v/v)**	**0.025**
Carbon tetrachloride	ND	0.10	ppm(v/v)	0.025
Benzene	ND	0.10	ppm(v/v)	0.040
1,2-Dichloroethane	ND	0.10	ppm(v/v)	0.040
Trichloroethene	**13**	**0.10**	**ppm(v/v)**	**0.030**
1,2-Dichloropropane	ND	0.10	ppm(v/v)	0.040
Bromodichloromethane	ND	0.10	ppm(v/v)	0.040
cis-1,3-Dichloropropene	ND	0.10	ppm(v/v)	0.025
4-Methyl-2-pentanone (MIBK)	ND	0.50	ppm(v/v)	0.10
Toluene	ND	0.25	ppm(v/v)	0.025
trans-1,3-Dichloropropene	ND	0.10	ppm(v/v)	0.040
1,1,2-Trichloroethane	ND	0.10	ppm(v/v)	0.030
Tetrachloroethene	**0.19**	**0.10**	**ppm(v/v)**	**0.025**
2-Hexanone	ND	1.5	ppm(v/v)	0.050

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002U_AV050302_0001

GC/MS Volatiles

Lot-Sample #...: E2E030308-002 **Work Order #...:** E0W361AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.10	ppm(v/v)	0.025
1,2-Dibromoethane (EDB)	ND	0.10	ppm(v/v)	0.025
Chlorobenzene	ND	0.10	ppm(v/v)	0.025
Ethylbenzene	ND	0.10	ppm(v/v)	0.025
Xylenes (total)	ND	0.10	ppm(v/v)	0.040
Styrene	ND	0.10	ppm(v/v)	0.030
Bromoform	ND	0.10	ppm(v/v)	0.025
1,1,2,2-Tetrachloroethane	ND	0.10	ppm(v/v)	0.025
Benzyl chloride	ND	0.50	ppm(v/v)	0.040
4-Ethyltoluene	ND	0.10	ppm(v/v)	0.035
1,3,5-Trimethylbenzene	ND	0.10	ppm(v/v)	0.040
1,2,4-Trimethylbenzene	ND	0.10	ppm(v/v)	0.025
1,3-Dichlorobenzene	ND	0.10	ppm(v/v)	0.030
1,4-Dichlorobenzene	ND	0.10	ppm(v/v)	0.040
1,2-Dichlorobenzene	ND	0.10	ppm(v/v)	0.040
1,2,4-Trichloro-benzene	ND	1.0	ppm(v/v)	0.030
Hexachlorobutadiene	ND	0.20	ppm(v/v)	0.050
Methyl tert-butyl ether (MTBE)	ND	0.50	ppm(v/v)	0.025

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002U_AV050302_0001

GC/MS Volatiles

Lot-Sample #: E2E030308-002 **Work Order #:** E0W361AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

QC DATA ASSOCIATION SUMMARY

E2E030308

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2126284	
002	AIR	EPA-21 TO-14A		2126284	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2E030308 **Work Order #...:** E00X21AA **Matrix.....:** AIR
MB Lot-Sample #: M2E060000-284

Prep Date.....: 05/03/02 **Analysis Time..:** 10:42
Analysis Date..: 05/03/02 **Prep Batch #...:** 2126284 **Instrument ID..:** MSB
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2E030308 **Work Order #...:** E00X21AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2E030308 Work Order #...: E00X21AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2E060000-284 E00X21AD-LCSD
Prep Date.....: 05/03/02 Analysis Date..: 05/03/02
Prep Batch #...: 2126284 Analysis Time..: 09:37
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	87	(70 - 125)			EPA-21 TO-14A
	88	(70 - 125)	1.9	(0-20)	EPA-21 TO-14A
Methylene chloride	85	(75 - 120)			EPA-21 TO-14A
	86	(75 - 120)	1.0	(0-20)	EPA-21 TO-14A
Trichloroethene	87	(80 - 125)			EPA-21 TO-14A
	87	(80 - 125)	0.46	(0-20)	EPA-21 TO-14A
Toluene	92	(70 - 120)			EPA-21 TO-14A
	94	(70 - 120)	2.2	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	81	(70 - 130)			EPA-21 TO-14A
	86	(70 - 130)	5.1	(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 #...: E2E030308 Work Order #...: E00X21AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2E060000-284 E00X21AD-LCSD
Prep Date.....: 05/03/02 Analysis Date..: 05/03/02
Prep Batch #...: 2126284 Analysis Time..: 09:37
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0513	ppm(v/v)	87		EPA-21 TO-14A
	0.0592	0.0523	ppm(v/v)	88	1.9	EPA-21 TO-14A
Methylene chloride	0.0587	0.0502	ppm(v/v)	85		EPA-21 TO-14A
	0.0587	0.0507	ppm(v/v)	86	1.0	EPA-21 TO-14A
Trichloroethene	0.0594	0.0518	ppm(v/v)	87		EPA-21 TO-14A
	0.0594	0.0515	ppm(v/v)	87	0.46	EPA-21 TO-14A
Toluene	0.0557	0.0512	ppm(v/v)	92		EPA-21 TO-14A
	0.0557	0.0524	ppm(v/v)	94	2.2	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0450	ppm(v/v)	81		EPA-21 TO-14A
	0.0554	0.0474	ppm(v/v)	86	5.1	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 SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

June 13, 2002

STL LOT NUMBER: E2F050153
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on June 5, 2002. These samples are associated with your BRC former C-6 facility, Torrance, California project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Any matrix related anomaly is footnoted within the report. Please note that the samples for TO-14A were received in Tedlar Bags. Summa Canisters are the appropriate sample collection media for this method. The use of Tedlar Bags is a modification of the method.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager

CC: Project File

STL Los Angeles is a part of Severn Trent Laboratories, Inc.

ACCREDITED IN ACCORDANCE WITH nelac

BOE-C6-0003648

HALEY & ALDRICH
2601 Saturn Street, Suite 101
Brea, CA 92821
(714) 985-3434 Fax (714) 985-3433

CHAIN OF CUSTODY FORM

№ 0709

Project Name/Address: Boeing C-6

Project /PO Number: 28997-003

Project Manager: Rich Farson

Phone Number:

Sampled by (signature):

Fax Number:

Lab Name: STL

Lab Address: E2F050153

Analysis Required: TO-14

Sample Identification	Lab ID No.	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	TO-14	Special Instructions
GAC0002D	AV060402-0001			1	6/4/02	1300	—	X	
GAC0002E	AV060402-0001			1	6/4/02	1245	—	X	

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	6/5/02 0812	[signature]	6/05/02 812
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turnaround Time (Check) STD
24 Hours ___ 5 Days ___
48 Hours ___ 10 Days ___
72 Hours ___ Other ___

Sample Integrity (Check):
On Ice ___ Intact ___

Page 1 of 1

000002

BOE-C6-0003649

STL LOS ANGELES

PROJECT RECEIPT CHECKLIST **Date: 06/05/02**

Quantims Lot #: **E2F050153** Quote #:**42295**

Client Name: **HALEY & ALDRICH** Project: **BOEING, C-6(28997-003)**

Received by: **K. FREITAG** Date/Time Received:**6/5/02** **0812AM**

Delivery by : ☒**CLIENT**

****

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☒None ..... KT 6/5

Custody Seal #(s):_____ ☒No Seal # .....

Sample Container(s): ☒STL-LA ☐Client ☐N/A .....

Temperature(s) (Cooler/blank) in °C:_____Correction factor_____(Corrected Temp.)____ ... **N/A**

Thermometer Used : ID:_____ ☐IR (Infra-red) ☐Digital (Probe) .... **N/A**

Samples: ☒Intact ☐Broken ☐Other_____..... KT 6/5

Anomalies: ☒No ☐Yes (See Clouseau) .....

Labeled by .....

Labeling checked by .....

****

Turn Around Time: ☐RUSH–24HR ☐RUSH–48HR ☐RUSH–72HR ☒NORMAL..... KT 6/5

Outside Analysis(es) (Test/Lab/Date Sent Out) :

N/A ....

....

....

....

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	1/2										pH
VOAh /*											N/A
1L TEDLAR BAG	1										N/A

h:HCl CGJ:Clear Glass Jar | na:Sodium Hydroxide CGB:Clear Glass Bottle | znna:Zinc Acetate/Sodium Hydroxide AGJ:Amber Glass Jar | s: H2SO4 | n:HNO3 | n/f:HNO3-Field filtered | n/f/l:HNO3-Lab filtered | TB:TEDLAR BAG | AGB:Amber Glass Bottle | PB: Poly Bottle | E:Encore Sampler | V:VOA | SL:Sleeve

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: KT 6-5-02 REVIEWED BY/DATE: 6/5/02

PRC Ver. 6 081401 KRF QANACA01\N:\Precis\Sample Control Forms

000003

SEVERN TRENT SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E2F050153

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002D_AV060402_0001 06/04/02 13:00 001				
Total Non-Methane Hydrocarbons	19	10	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.011 J	0.040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.023 J	0.040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.3	0.040	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.018 J	0.040	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.038 J	0.040	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.038 J	0.040	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.96	0.20	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.54	0.040	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.56	0.040	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	0.023 J	0.040	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	6.1	0.040	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	0.087 J	0.20	ppm(v/v)	EPA-21 TO-14A
Toluene	0.52	0.10	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.11	0.040	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	0.018 J	0.040	ppm(v/v)	EPA-21 TO-14A
GAC0002E_AV060402_0001 06/04/02 12:45 002				
Total Non-Methane Hydrocarbons	4.8 J	6.2	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.012 J	0.025	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.088	0.025	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	4.1	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	0.018 J	0.025	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.034	0.025	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.11	0.025	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	0.053 J	0.12	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.18	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.035	0.025	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	0.012 J	0.025	ppm(v/v)	EPA-21 TO-14A
Toluene	0.064	0.062	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2F050153

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2F050153

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E2GF2	001	GAC0002D_AV060402_0001	06/04/02	13:00
E2GF4	002	GAC0002E_AV060402_0001	06/04/02	12:45

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV060402_0001

GC/MS Volatiles

Lot-Sample #...:	E2F050153-001	Work Order #...:	E2GF21AA	Matrix.....:	AIR
Date Sampled...:	06/04/02 13:00	Date Received..:	06/05/02 08:12	MS Run #.....:	
Prep Date.....:	06/05/02	Analysis Date..:	06/05/02		
Prep Batch #...:	2157528	Analysis Time..:	13:30		
Dilution Factor:	20				
Analyst ID.....:	117751	Instrument ID..:	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**19**	**10**	**ppm(v/v)**	**2.0**
Dichlorodifluoromethane	**0.011 J**	**0.040**	**ppm(v/v)**	**0.010**
Chloromethane	ND	0.080	ppm(v/v)	0.020
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.040	ppm(v/v)	0.016
Vinyl chloride	ND	0.040	ppm(v/v)	0.016
Bromomethane	ND	0.040	ppm(v/v)	0.020
Chloroethane	ND	0.080	ppm(v/v)	0.016
Trichlorofluoromethane	**0.023 J**	**0.040**	**ppm(v/v)**	**0.010**
1,1-Dichloroethene	**1.3**	**0.040**	**ppm(v/v)**	**0.010**
Carbon disulfide	ND	0.20	ppm(v/v)	0.040
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.040	ppm(v/v)	0.010
Acetone	ND	0.20	ppm(v/v)	0.040
Methylene chloride	**0.018 J**	**0.040**	**ppm(v/v)**	**0.016**
trans-1,2-Dichloroethene	ND	0.040	ppm(v/v)	0.010
1,1-Dichloroethane	**0.038 J**	**0.040**	**ppm(v/v)**	**0.010**
Vinyl acetate	ND	0.20	ppm(v/v)	0.040
cis-1,2-Dichloroethene	**0.038 J**	**0.040**	**ppm(v/v)**	**0.016**
2-Butanone (MEK)	**0.96**	**0.20**	**ppm(v/v)**	**0.040**
Chloroform	**0.54**	**0.040**	**ppm(v/v)**	**0.016**
1,1,1-Trichloroethane	**0.56**	**0.040**	**ppm(v/v)**	**0.010**
Carbon tetrachloride	**0.023 J**	**0.040**	**ppm(v/v)**	**0.010**
Benzene	ND	0.040	ppm(v/v)	0.016
1,2-Dichloroethane	ND	0.040	ppm(v/v)	0.016
Trichloroethene	**6.1**	**0.040**	**ppm(v/v)**	**0.012**
1,2-Dichloropropane	ND	0.040	ppm(v/v)	0.016
Bromodichloromethane	ND	0.040	ppm(v/v)	0.016
cis-1,3-Dichloropropene	ND	0.040	ppm(v/v)	0.010
4-Methyl-2-pentanone (MIBK)	**0.087 J**	**0.20**	**ppm(v/v)**	**0.040**
Toluene	**0.52**	**0.10**	**ppm(v/v)**	**0.010**
trans-1,3-Dichloropropene	ND	0.040	ppm(v/v)	0.016
1,1,2-Trichloroethane	ND	0.040	ppm(v/v)	0.012
Tetrachloroethene	**0.11**	**0.040**	**ppm(v/v)**	**0.010**
2-Hexanone	ND	0.60	ppm(v/v)	0.020

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV060402_0001

GC/MS Volatiles

Lot-Sample #...: E2F050153-001 Work Order #...: E2GF21AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.040	ppm(v/v)	0.010
1,2-Dibromoethane (EDB)	ND	0.040	ppm(v/v)	0.010
Chlorobenzene	ND	0.040	ppm(v/v)	0.010
Ethylbenzene	ND	0.040	ppm(v/v)	0.010
Xylenes (total)	**0.018 J**	**0.040**	**ppm(v/v)**	**0.016**
Styrene	ND	0.040	ppm(v/v)	0.012
Bromoform	ND	0.040	ppm(v/v)	0.010
1,1,2,2-Tetrachloroethane	ND	0.040	ppm(v/v)	0.010
Benzyl chloride	ND	0.20	ppm(v/v)	0.016
4-Ethyltoluene	ND	0.040	ppm(v/v)	0.014
1,3,5-Trimethylbenzene	ND	0.040	ppm(v/v)	0.016
1,2,4-Trimethylbenzene	ND	0.040	ppm(v/v)	0.010
1,3-Dichlorobenzene	ND	0.040	ppm(v/v)	0.012
1,4-Dichlorobenzene	ND	0.040	ppm(v/v)	0.016
1,2-Dichlorobenzene	ND	0.040	ppm(v/v)	0.016
1,2,4-Trichloro-benzene	ND	0.40	ppm(v/v)	0.012
Hexachlorobutadiene	ND	0.080	ppm(v/v)	0.020
Methyl tert-butyl ether (MTBE)	ND	0.20	ppm(v/v)	0.010

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002D_AV060402_0001

GC/MS Volatiles

Lot-Sample #: E2F050153-001 **Work Order #:** E2GF21AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV060402_0001

GC/MS Volatiles

Lot-Sample #...:	E2F050153-002	Work Order #...:	E2GF41AA	Matrix.....:	AIR
Date Sampled...:	06/04/02 12:45	Date Received..:	06/05/02 08:12	MS Run #.....:	
Prep Date.....:	06/05/02	Analysis Date..:	06/05/02		
Prep Batch #...:	2157528	Analysis Time..:	14:04		
Dilution Factor:	12.5				
Analyst ID.....:	117751	Instrument ID..:	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**4.8 J**	**6.2**	**ppm(v/v)**	**1.2**
Dichlorodifluoromethane	**0.012 J**	**0.025**	**ppm(v/v)**	**0.0062**
Chloromethane	ND	0.050	ppm(v/v)	0.012
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.025	ppm(v/v)	0.010
Vinyl chloride	ND	0.025	ppm(v/v)	0.010
Bromomethane	ND	0.025	ppm(v/v)	0.012
Chloroethane	ND	0.050	ppm(v/v)	0.010
Trichlorofluoromethane	**0.088**	**0.025**	**ppm(v/v)**	**0.0062**
1,1-Dichloroethene	**4.1**	**0.025**	**ppm(v/v)**	**0.0062**
Carbon disulfide	ND	0.12	ppm(v/v)	0.025
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.018 J**	**0.025**	**ppm(v/v)**	**0.0062**
Acetone	ND	0.12	ppm(v/v)	0.025
Methylene chloride	**0.034**	**0.025**	**ppm(v/v)**	**0.010**
trans-1,2-Dichloroethene	ND	0.025	ppm(v/v)	0.0062
1,1-Dichloroethane	**0.11**	**0.025**	**ppm(v/v)**	**0.0062**
Vinyl acetate	ND	0.12	ppm(v/v)	0.025
cis-1,2-Dichloroethene	ND	0.025	ppm(v/v)	0.010
2-Butanone (MEK)	**0.053 J**	**0.12**	**ppm(v/v)**	**0.025**
Chloroform	**0.18**	**0.025**	**ppm(v/v)**	**0.010**
1,1,1-Trichloroethane	**0.035**	**0.025**	**ppm(v/v)**	**0.0062**
Carbon tetrachloride	ND	0.025	ppm(v/v)	0.0062
Benzene	ND	0.025	ppm(v/v)	0.010
1,2-Dichloroethane	ND	0.025	ppm(v/v)	0.010
Trichloroethene	**0.012 J**	**0.025**	**ppm(v/v)**	**0.0075**
1,2-Dichloropropane	ND	0.025	ppm(v/v)	0.010
Bromodichloromethane	ND	0.025	ppm(v/v)	0.010
cis-1,3-Dichloropropene	ND	0.025	ppm(v/v)	0.0062
4-Methyl-2-pentanone (MIBK)	ND	0.12	ppm(v/v)	0.025
Toluene	**0.064**	**0.062**	**ppm(v/v)**	**0.0062**
trans-1,3-Dichloropropene	ND	0.025	ppm(v/v)	0.010
1,1,2-Trichloroethane	ND	0.025	ppm(v/v)	0.0075
Tetrachloroethene	ND	0.025	ppm(v/v)	0.0062
2-Hexanone	ND	0.38	ppm(v/v)	0.012

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV060402_0001

GC/MS Volatiles

Lot-Sample #...: E2F050153-002 Work Order #...: E2GF41AA Matrix.....: AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.025	ppm(v/v)	0.0062
1,2-Dibromoethane (EDB)	ND	0.025	ppm(v/v)	0.0062
Chlorobenzene	ND	0.025	ppm(v/v)	0.0062
Ethylbenzene	ND	0.025	ppm(v/v)	0.0062
Xylenes (total)	ND	0.025	ppm(v/v)	0.010
Styrene	ND	0.025	ppm(v/v)	0.0075
Bromoform	ND	0.025	ppm(v/v)	0.0062
1,1,2,2-Tetrachloroethane	ND	0.025	ppm(v/v)	0.0062
Benzyl chloride	ND	0.12	ppm(v/v)	0.010
4-Ethyltoluene	ND	0.025	ppm(v/v)	0.0088
1,3,5-Trimethylbenzene	ND	0.025	ppm(v/v)	0.010
1,2,4-Trimethylbenzene	ND	0.025	ppm(v/v)	0.0062
1,3-Dichlorobenzene	ND	0.025	ppm(v/v)	0.0075
1,4-Dichlorobenzene	ND	0.025	ppm(v/v)	0.010
1,2-Dichlorobenzene	ND	0.025	ppm(v/v)	0.010
1,2,4-Trichloro-benzene	ND	0.25	ppm(v/v)	0.0075
Hexachlorobutadiene	ND	0.050	ppm(v/v)	0.012
Methyl tert-butyl ether (MTBE)	ND	0.12	ppm(v/v)	0.0062

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV060402_0001

GC/MS Volatiles

Lot-Sample #: E2F050153-002 **Work Order #:** E2GF41AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

SEVERN
TRENT
SERVICES

QA/QC

QC DATA ASSOCIATION SUMMARY

E2F050153

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2157528	
002	AIR	EPA-21 TO-14A		2157528	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2F050153
MB Lot-Sample #: M2F060000-528

Work Order #...: E2LM11AA

Matrix.....: AIR

Prep Date.....: 06/05/02

Analysis Time..: 12:57

Analysis Date..: 06/05/02
Dilution Factor: 1

Prep Batch #...: 2157528

Instrument ID..: MSB

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2F050153 **Work Order #...:** E2LM11AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2F050153 Work Order #...: E2LM11AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2F060000-528 E2LM11AD-LCSD
Prep Date.....: 06/05/02 Analysis Date..: 06/05/02
Prep Batch #...: 2157528 Analysis Time..: 11:16
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	89	(70 - 125)			EPA-21 TO-14A
	89	(70 - 125)	0.75	(0-20)	EPA-21 TO-14A
Methylene chloride	91	(75 - 120)			EPA-21 TO-14A
	90	(75 - 120)	2.1	(0-20)	EPA-21 TO-14A
Trichloroethene	93	(80 - 125)			EPA-21 TO-14A
	95	(80 - 125)	2.7	(0-20)	EPA-21 TO-14A
Toluene	97	(70 - 120)			EPA-21 TO-14A
	98	(70 - 120)	1.1	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	82	(70 - 130)			EPA-21 TO-14A
	82	(70 - 130)	0.0	(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 #...: E2F050153 Work Order #...: E2LM11AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2F060000-528 E2LM11AD-LCSD
Prep Date.....: 06/05/02 Analysis Date..: 06/05/02
Prep Batch #...: 2157528 Analysis Time..: 11:16
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0529	ppm(v/v)	89		EPA-21 TO-14A
	0.0592	0.0525	ppm(v/v)	89	0.75	EPA-21 TO-14A
Methylene chloride	0.0587	0.0537	ppm(v/v)	91		EPA-21 TO-14A
	0.0587	0.0526	ppm(v/v)	90	2.1	EPA-21 TO-14A
Trichloroethene	0.0594	0.0552	ppm(v/v)	93		EPA-21 TO-14A
	0.0594	0.0567	ppm(v/v)	95	2.7	EPA-21 TO-14A
Toluene	0.0557	0.0542	ppm(v/v)	97		EPA-21 TO-14A
	0.0557	0.0548	ppm(v/v)	98	1.1	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0456	ppm(v/v)	82		EPA-21 TO-14A
	0.0554	0.0456	ppm(v/v)	82	0.0	EPA-21 TO-14A

NOTE(S):

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

Bold print denotes control parameters

ANALYTICAL REPORT

BRC C-6, Torrance HaleyAldrich

Lot #: E2G030379

Scott Zachary

Haley & Aldrich Inc

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

July 15, 2002

EXECUTIVE SUMMARY - Detection Highlights

E2G030379

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002D_AV070302_0001 07/03/02 11:30 001				
Total Non-Methane Hydrocarbons	11	5.0	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.012 J	0.020	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.030	0.020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	1.1	0.020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0052 J	0.020	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.012 J	0.020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.028	0.020	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.029	0.020	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.64	0.020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.082	0.020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	0.025	0.020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	3.8	0.020	ppm(v/v)	EPA-21 TO-14A
Toluene	0.011 J	0.050	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.080	0.020	ppm(v/v)	EPA-21 TO-14A
GAC0002E_AV070302_0001 07/03/02 11:30 002				
Total Non-Methane Hydrocarbons	3.0 J	4.2	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.013 J	0.017	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.068	0.017	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	2.7	0.017	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0081 J	0.017	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.021	0.017	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.067	0.017	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.26	0.017	ppm(v/v)	EPA-21 TO-14A

METHODS SUMMARY

E2G030379

PARAMETER	ANALYTICAL METHOD	PREPARATION 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

E2G030379

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E39MD	001	GAC0002D_AV070302_0001	07/03/02	11:30
E39ME	002	GAC0002E_AV070302_0001	07/03/02	11:30

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV070302_0001

GC/MS Volatiles

Lot-Sample #...: E2G030379-001 **Work Order #...:** E39MD1AA **Matrix.....:** AIR
Date Sampled...: 07/03/02 11:30 **Date Received..:** 07/03/02 18:50 **MS Run #.....:**
Prep Date.....: 07/05/02 **Analysis Date..:** 07/05/02
Prep Batch #...: 2190270 **Analysis Time..:** 13:29
Dilution Factor: 10
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**11**	**5.0**	**ppm(v/v)**	**1.0**
Dichlorodifluoromethane	**0.012 J**	**0.020**	**ppm(v/v)**	**0.0050**
Chloromethane	ND	0.040	ppm(v/v)	0.010
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.020	ppm(v/v)	0.0080
Vinyl chloride	ND	0.020	ppm(v/v)	0.0080
Bromomethane	ND	0.020	ppm(v/v)	0.010
Chloroethane	ND	0.040	ppm(v/v)	0.0080
Trichlorofluoromethane	**0.030**	**0.020**	**ppm(v/v)**	**0.0050**
1,1-Dichloroethene	**1.1**	**0.020**	**ppm(v/v)**	**0.0050**
Carbon disulfide	ND	0.10	ppm(v/v)	0.020
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.0052 J**	**0.020**	**ppm(v/v)**	**0.0050**
Acetone	ND	0.10	ppm(v/v)	0.020
Methylene chloride	**0.012 J**	**0.020**	**ppm(v/v)**	**0.0080**
trans-1,2-Dichloroethene	ND	0.020	ppm(v/v)	0.0050
1,1-Dichloroethane	**0.028**	**0.020**	**ppm(v/v)**	**0.0050**
Vinyl acetate	ND	0.10	ppm(v/v)	0.020
cis-1,2-Dichloroethene	**0.029**	**0.020**	**ppm(v/v)**	**0.0080**
2-Butanone (MEK)	ND	0.10	ppm(v/v)	0.020
Chloroform	**0.64**	**0.020**	**ppm(v/v)**	**0.0080**
1,1,1-Trichloroethane	**0.082**	**0.020**	**ppm(v/v)**	**0.0050**
Carbon tetrachloride	**0.025**	**0.020**	**ppm(v/v)**	**0.0050**
Benzene	ND	0.020	ppm(v/v)	0.0080
1,2-Dichloroethane	ND	0.020	ppm(v/v)	0.0080
Trichloroethene	**3.8**	**0.020**	**ppm(v/v)**	**0.0060**
1,2-Dichloropropane	ND	0.020	ppm(v/v)	0.0080
Bromodichloromethane	ND	0.020	ppm(v/v)	0.0080
cis-1,3-Dichloropropene	ND	0.020	ppm(v/v)	0.0050
4-Methyl-2-pentanone (MIBK)	ND	0.10	ppm(v/v)	0.020
Toluene	**0.011 J**	**0.050**	**ppm(v/v)**	**0.0050**
trans-1,3-Dichloropropene	ND	0.020	ppm(v/v)	0.0080
1,1,2-Trichloroethane	ND	0.020	ppm(v/v)	0.0060
Tetrachloroethene	**0.080**	**0.020**	**ppm(v/v)**	**0.0050**
2-Hexanone	ND	0.30	ppm(v/v)	0.010

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV070302_0001

GC/MS Volatiles

Lot-Sample #...: E2G030379-001 **Work Order #...:** E39MD1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.020	ppm(v/v)	0.0050
1,2-Dibromoethane (EDB)	ND	0.020	ppm(v/v)	0.0050
Chlorobenzene	ND	0.020	ppm(v/v)	0.0050
Ethylbenzene	ND	0.020	ppm(v/v)	0.0050
Xylenes (total)	ND	0.020	ppm(v/v)	0.0080
Styrene	ND	0.020	ppm(v/v)	0.0060
Bromoform	ND	0.020	ppm(v/v)	0.0050
1,1,2,2-Tetrachloroethane	ND	0.020	ppm(v/v)	0.0050
Benzyl chloride	ND	0.10	ppm(v/v)	0.0080
4-Ethyltoluene	ND	0.020	ppm(v/v)	0.0070
1,3,5-Trimethylbenzene	ND	0.020	ppm(v/v)	0.0080
1,2,4-Trimethylbenzene	ND	0.020	ppm(v/v)	0.0050
1,3-Dichlorobenzene	ND	0.020	ppm(v/v)	0.0060
1,4-Dichlorobenzene	ND	0.020	ppm(v/v)	0.0080
1,2-Dichlorobenzene	ND	0.020	ppm(v/v)	0.0080
1,2,4-Trichloro-benzene	ND	0.20	ppm(v/v)	0.0060
Hexachlorobutadiene	ND	0.040	ppm(v/v)	0.010
Methyl tert-butyl ether (MTBE)	ND	0.10	ppm(v/v)	0.0050

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002D_AV070302_0001

GC/MS Volatiles

Lot-Sample #: E2G030379-001 **Work Order #:** E39MD1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Dodecane	112-40-3	0.060	M	22.736	ppm(v/v)
Unknown aromatic		0.082	M	22.799	ppm(v/v)
Unknown branched alkane		0.059	M	22.934	ppm(v/v)
Unknown aromatic		0.083	M	23.024	ppm(v/v)
Unknown hydrocarbon		0.11	M	23.539	ppm(v/v)
Unknown branched alkane		0.081	M	23.737	ppm(v/v)
Unknown aromatic		0.055	M	23.936	ppm(v/v)
Unknown branched alkane		0.060	M	24.107	ppm(v/v)
Unknown aromatic		0.12	M	24.234	ppm(v/v)
Unknown aromatic		0.14	M	24.514	ppm(v/v)

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV070302_0001

GC/MS Volatiles

Lot-Sample #...: E2G030379-002 **Work Order #...:** E39ME1AA **Matrix.....:** AIR
Date Sampled...: 07/03/02 11:30 **Date Received..:** 07/03/02 18:50 **MS Run #.....:**
Prep Date.....: 07/05/02 **Analysis Date..:** 07/05/02
Prep Batch #...: 2190270 **Analysis Time..:** 14:02
Dilution Factor: 8.33
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**3.0 J**	**4.2**	**ppm(v/v)**	**0.83**
Dichlorodifluoromethane	**0.013 J**	**0.017**	**ppm(v/v)**	**0.0042**
Chloromethane	ND	0.033	ppm(v/v)	0.0083
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.017	ppm(v/v)	0.0067
Vinyl chloride	ND	0.017	ppm(v/v)	0.0067
Bromomethane	ND	0.017	ppm(v/v)	0.0083
Chloroethane	ND	0.033	ppm(v/v)	0.0067
Trichlorofluoromethane	**0.068**	**0.017**	**ppm(v/v)**	**0.0042**
1,1-Dichloroethene	**2.7**	**0.017**	**ppm(v/v)**	**0.0042**
Carbon disulfide	ND	0.083	ppm(v/v)	0.017
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.0081 J**	**0.017**	**ppm(v/v)**	**0.0042**
Acetone	ND	0.083	ppm(v/v)	0.017
Methylene chloride	**0.021**	**0.017**	**ppm(v/v)**	**0.0067**
trans-1,2-Dichloroethene	ND	0.017	ppm(v/v)	0.0042
1,1-Dichloroethane	**0.067**	**0.017**	**ppm(v/v)**	**0.0042**
Vinyl acetate	ND	0.083	ppm(v/v)	0.017
cis-1,2-Dichloroethene	ND	0.017	ppm(v/v)	0.0067
2-Butanone (MEK)	ND	0.083	ppm(v/v)	0.017
Chloroform	**0.26**	**0.017**	**ppm(v/v)**	**0.0067**
1,1,1-Trichloroethane	ND	0.017	ppm(v/v)	0.0042
Carbon tetrachloride	ND	0.017	ppm(v/v)	0.0042
Benzene	ND	0.017	ppm(v/v)	0.0067
1,2-Dichloroethane	ND	0.017	ppm(v/v)	0.0067
Trichloroethene	ND	0.017	ppm(v/v)	0.0050
1,2-Dichloropropane	ND	0.017	ppm(v/v)	0.0067
Bromodichloromethane	ND	0.017	ppm(v/v)	0.0067
cis-1,3-Dichloropropene	ND	0.017	ppm(v/v)	0.0042
4-Methyl-2-pentanone (MIBK)	ND	0.083	ppm(v/v)	0.017
Toluene	ND	0.042	ppm(v/v)	0.0042
trans-1,3-Dichloropropene	ND	0.017	ppm(v/v)	0.0067
1,1,2-Trichloroethane	ND	0.017	ppm(v/v)	0.0050
Tetrachloroethene	ND	0.017	ppm(v/v)	0.0042
2-Hexanone	ND	0.25	ppm(v/v)	0.0083

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV070302_0001

GC/MS Volatiles

Lot-Sample #...: E2G030379-002 **Work Order #...:** E39ME1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.017	ppm(v/v)	0.0042
1,2-Dibromoethane (EDB)	ND	0.017	ppm(v/v)	0.0042
Chlorobenzene	ND	0.017	ppm(v/v)	0.0042
Ethylbenzene	ND	0.017	ppm(v/v)	0.0042
Xylenes (total)	ND	0.017	ppm(v/v)	0.0067
Styrene	ND	0.017	ppm(v/v)	0.0050
Bromoform	ND	0.017	ppm(v/v)	0.0042
1,1,2,2-Tetrachloroethane	ND	0.017	ppm(v/v)	0.0042
Benzyl chloride	ND	0.083	ppm(v/v)	0.0067
4-Ethyltoluene	ND	0.017	ppm(v/v)	0.0058
1,3,5-Trimethylbenzene	ND	0.017	ppm(v/v)	0.0067
1,2,4-Trimethylbenzene	ND	0.017	ppm(v/v)	0.0042
1,3-Dichlorobenzene	ND	0.017	ppm(v/v)	0.0050
1,4-Dichlorobenzene	ND	0.017	ppm(v/v)	0.0067
1,2-Dichlorobenzene	ND	0.017	ppm(v/v)	0.0067
1,2,4-Trichloro-benzene	ND	0.17	ppm(v/v)	0.0050
Hexachlorobutadiene	ND	0.033	ppm(v/v)	0.0083
Methyl tert-butyl ether (MTBE)	ND	0.083	ppm(v/v)	0.0042

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV070302_0001

GC/MS Volatiles

Lot-Sample #: E2G030379-002 **Work Order #:** E39ME1AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

QC DATA ASSOCIATION SUMMARY

E2G030379

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2190270	
002	AIR	EPA-21 TO-14A		2190270	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2G030379 **Work Order #...:** E4EA81AA **Matrix.....:** AIR
MB Lot-Sample #: M2G090000-270

Prep Date.....: 07/05/02 **Analysis Time..:** 12:14
Analysis Date..: 07/05/02 **Prep Batch #...:** 2190270 **Instrument ID..:** MSB
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2G030379 **Work Order #...:** E4EA81AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2G030379 Work Order #...: E4EA81AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2G090000-270 E4EA81AD-LCSD
Prep Date.....: 07/05/02 Analysis Date..: 07/05/02
Prep Batch #...: 2190270 Analysis Time..: 10:53
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
	100	(70 - 125)	0.69	(0-20)	EPA-21 TO-14A
Methylene chloride	92	(75 - 120)			EPA-21 TO-14A
	94	(75 - 120)	1.5	(0-20)	EPA-21 TO-14A
Trichloroethene	108	(80 - 125)			EPA-21 TO-14A
	103	(80 - 125)	4.4	(0-20)	EPA-21 TO-14A
Toluene	99	(70 - 120)			EPA-21 TO-14A
	101	(70 - 120)	2.2	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	78	(70 - 130)			EPA-21 TO-14A
	82	(70 - 130)	5.7	(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 #...: E2G030379 Work Order #...: E4EA81AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2G090000-270 E4EA81AD-LCSD
Prep Date.....: 07/05/02 Analysis Date..: 07/05/02
Prep Batch #...: 2190270 Analysis Time..: 10:53
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0591	0.0589	ppm(v/v)	100		EPA-21 TO-14A
	0.0591	0.0593	ppm(v/v)	100	0.69	EPA-21 TO-14A
Methylene chloride	0.0587	0.0543	ppm(v/v)	92		EPA-21 TO-14A
	0.0587	0.0551	ppm(v/v)	94	1.5	EPA-21 TO-14A
Trichloroethene	0.0595	0.0642	ppm(v/v)	108		EPA-21 TO-14A
	0.0595	0.0615	ppm(v/v)	103	4.4	EPA-21 TO-14A
Toluene	0.0557	0.0549	ppm(v/v)	99		EPA-21 TO-14A
	0.0557	0.0561	ppm(v/v)	101	2.2	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0431	ppm(v/v)	78		EPA-21 TO-14A
	0.0554	0.0456	ppm(v/v)	82	5.7	EPA-21 TO-14A

NOTE(S):

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

Bold print denotes control parameters

ANALYTICAL REPORT

Boeing BR C-6 Torrance HalAld

Lot #: E2H160208

Scott Zachary

Haley & Aldrich Inc

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

August 22, 2002

EXECUTIVE SUMMARY - Detection Highlights

E2H160208

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GAC0002U_AV081502_0001 08/15/02 14:00 001				
Total Non-Methane Hydrocarbons	12	6.2	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.0084 J	0.025	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.021 J	0.025	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.83	0.025	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.012 J	0.025	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.024 J	0.025	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.025	0.025	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.76	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.075	0.025	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	0.027	0.025	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	4.9	0.025	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.18	0.025	ppm(v/v)	EPA-21 TO-14A
GAC0002D_AV081502_0001 08/15/02 14:00 002				
Total Non-Methane Hydrocarbons	11	2.5	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.0089 J	0.010	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.023	0.010	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	0.93	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.011	0.010	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.027	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	0.024	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.78	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	0.081	0.010	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	0.029	0.010	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	4.4	0.17	ppm(v/v)	EPA-21 TO-14A
Toluene	0.0039 J	0.025	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	0.0064 J	0.010	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	0.15	0.010	ppm(v/v)	EPA-21 TO-14A
GAC0002E_AV081502_0001 08/15/02 14:00 003				
Total Non-Methane Hydrocarbons	3.5 J	4.2	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	0.0072 J	0.017	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	0.039	0.017	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	2.6	0.017	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	0.016 J	0.017	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	0.095	0.017	ppm(v/v)	EPA-21 TO-14A
Chloroform	0.86	0.017	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E2H160208

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
HA_160_081502_0001 08/15/02 12:00 004				
Methyl tert-butyl ether	4.4	1.0	ug/L	SW846 8260B

METHODS SUMMARY

E2H160208

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826
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

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E2H160208

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E6MN4	001	GAC0002U_AV081502_0001	08/15/02	14:00
E6MN8	002	GAC0002D_AV081502_0001	08/15/02	14:00
E6MN9	003	GAC0002E_AV081502_0001	08/15/02	14:00
E6MPA	004	HA_160_081502_0001	08/15/02	12:00

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.

HALEY & ALDRICH INC

Client Sample ID: GAC0002U_AV081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-001 **Work Order #...:** E6MN41AA **Matrix.....:** AIR
Date Sampled...: 08/15/02 14:00 **Date Received..:** 08/15/02 21:50 **MS Run #.....:**
Prep Date.....: 08/16/02 **Analysis Date..:** 08/16/02
Prep Batch #...: 2228496 **Analysis Time..:** 14:18
Dilution Factor: 12.5
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**12**	**6.2**	**ppm(v/v)**	**1.2**
Dichlorodifluoromethane	**0.0084 J**	**0.025**	**ppm(v/v)**	**0.0062**
Chloromethane	ND	0.050	ppm(v/v)	0.012
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.025	ppm(v/v)	0.010
Vinyl chloride	ND	0.025	ppm(v/v)	0.010
Bromomethane	ND	0.025	ppm(v/v)	0.012
Chloroethane	ND	0.050	ppm(v/v)	0.010
Trichlorofluoromethane	**0.021 J**	**0.025**	**ppm(v/v)**	**0.0062**
1,1-Dichloroethene	**0.83**	**0.025**	**ppm(v/v)**	**0.0062**
Carbon disulfide	ND	0.12	ppm(v/v)	0.025
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.025	ppm(v/v)	0.0062
Acetone	ND	0.12	ppm(v/v)	0.025
Methylene chloride	**0.012 J**	**0.025**	**ppm(v/v)**	**0.010**
trans-1,2-Dichloroethene	ND	0.025	ppm(v/v)	0.0062
1,1-Dichloroethane	**0.024 J**	**0.025**	**ppm(v/v)**	**0.0062**
Vinyl acetate	ND	0.12	ppm(v/v)	0.025
cis-1,2-Dichloroethene	**0.025**	**0.025**	**ppm(v/v)**	**0.010**
2-Butanone (MEK)	ND	0.12	ppm(v/v)	0.025
Chloroform	**0.76**	**0.025**	**ppm(v/v)**	**0.010**
1,1,1-Trichloroethane	**0.075**	**0.025**	**ppm(v/v)**	**0.0062**
Carbon tetrachloride	**0.027**	**0.025**	**ppm(v/v)**	**0.0062**
Benzene	ND	0.025	ppm(v/v)	0.010
1,2-Dichloroethane	ND	0.025	ppm(v/v)	0.010
Trichloroethene	**4.9**	**0.025**	**ppm(v/v)**	**0.0075**
1,2-Dichloropropane	ND	0.025	ppm(v/v)	0.010
Bromodichloromethane	ND	0.025	ppm(v/v)	0.010
cis-1,3-Dichloropropene	ND	0.025	ppm(v/v)	0.0062
4-Methyl-2-pentanone (MIBK)	ND	0.12	ppm(v/v)	0.025
Toluene	ND	0.062	ppm(v/v)	0.0062
trans-1,3-Dichloropropene	ND	0.025	ppm(v/v)	0.010
1,1,2-Trichloroethane	ND	0.025	ppm(v/v)	0.0075
Tetrachloroethene	**0.18**	**0.025**	**ppm(v/v)**	**0.0062**
2-Hexanone	ND	0.38	ppm(v/v)	0.012

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002U_AV081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-001 **Work Order #...:** E6MN41AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.025	ppm(v/v)	0.0062
1,2-Dibromoethane (EDB)	ND	0.025	ppm(v/v)	0.0062
Chlorobenzene	ND	0.025	ppm(v/v)	0.0062
Ethylbenzene	ND	0.025	ppm(v/v)	0.0062
Xylenes (total)	ND	0.025	ppm(v/v)	0.010
Styrene	ND	0.025	ppm(v/v)	0.0075
Bromoform	ND	0.025	ppm(v/v)	0.0062
1,1,2,2-Tetrachloroethane	ND	0.025	ppm(v/v)	0.0062
Benzyl chloride	ND	0.12	ppm(v/v)	0.010
4-Ethyltoluene	ND	0.025	ppm(v/v)	0.0088
1,3,5-Trimethylbenzene	ND	0.025	ppm(v/v)	0.010
1,2,4-Trimethylbenzene	ND	0.025	ppm(v/v)	0.0062
1,3-Dichlorobenzene	ND	0.025	ppm(v/v)	0.0075
1,4-Dichlorobenzene	ND	0.025	ppm(v/v)	0.010
1,2-Dichlorobenzene	ND	0.025	ppm(v/v)	0.010
1,2,4-Trichloro-benzene	ND	0.25	ppm(v/v)	0.0075
Hexachlorobutadiene	ND	0.050	ppm(v/v)	0.012
Methyl tert-butyl ether (MTBE)	ND	0.12	ppm(v/v)	0.0062

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002U_AV081502_0001

GC/MS Volatiles

Lot-Sample #: E2H160208-001 **Work Order #:** E6MN41AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-002 **Work Order #...:** E6MN81AA **Matrix.....:** AIR
Date Sampled...: 08/15/02 14:00 **Date Received..:** 08/15/02 21:50 **MS Run #.....:**
Prep Date.....: 08/16/02 **Analysis Date..:** 08/16/02
Prep Batch #...: 2228496 **Analysis Time..:** 17:05
Dilution Factor: 5
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**11**	**2.5**	**ppm(v/v)**	**0.50**
Dichlorodifluoromethane	**0.0089 J**	**0.010**	**ppm(v/v)**	**0.0025**
Chloromethane	ND	0.020	ppm(v/v)	0.0050
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.010	ppm(v/v)	0.0040
Vinyl chloride	ND	0.010	ppm(v/v)	0.0040
Bromomethane	ND	0.010	ppm(v/v)	0.0050
Chloroethane	ND	0.020	ppm(v/v)	0.0040
Trichlorofluoromethane	**0.023**	**0.010**	**ppm(v/v)**	**0.0025**
1,1-Dichloroethene	**0.93**	**0.010**	**ppm(v/v)**	**0.0025**
Carbon disulfide	ND	0.050	ppm(v/v)	0.010
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.010	ppm(v/v)	0.0025
Acetone	ND	0.050	ppm(v/v)	0.010
Methylene chloride	**0.011**	**0.010**	**ppm(v/v)**	**0.0040**
trans-1,2-Dichloroethene	ND	0.010	ppm(v/v)	0.0025
1,1-Dichloroethane	**0.027**	**0.010**	**ppm(v/v)**	**0.0025**
Vinyl acetate	ND	0.050	ppm(v/v)	0.010
cis-1,2-Dichloroethene	**0.024**	**0.010**	**ppm(v/v)**	**0.0040**
2-Butanone (MEK)	ND	0.050	ppm(v/v)	0.010
Chloroform	**0.78**	**0.010**	**ppm(v/v)**	**0.0040**
1,1,1-Trichloroethane	**0.081**	**0.010**	**ppm(v/v)**	**0.0025**
Carbon tetrachloride	**0.029**	**0.010**	**ppm(v/v)**	**0.0025**
Benzene	ND	0.010	ppm(v/v)	0.0040
1,2-Dichloroethane	ND	0.010	ppm(v/v)	0.0040
1,2-Dichloropropane	ND	0.010	ppm(v/v)	0.0040
Bromodichloromethane	ND	0.010	ppm(v/v)	0.0040
cis-1,3-Dichloropropene	ND	0.010	ppm(v/v)	0.0025
4-Methyl-2-pentanone (MIBK)	ND	0.050	ppm(v/v)	0.010
Toluene	**0.0039 J**	**0.025**	**ppm(v/v)**	**0.0025**
trans-1,3-Dichloropropene	ND	0.010	ppm(v/v)	0.0040
1,1,2-Trichloroethane	**0.0064 J**	**0.010**	**ppm(v/v)**	**0.0030**
Tetrachloroethene	**0.15**	**0.010**	**ppm(v/v)**	**0.0025**
2-Hexanone	ND	0.15	ppm(v/v)	0.0050
Dibromochloromethane	ND	0.010	ppm(v/v)	0.0025

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-002 **Work Order #...:** E6MN81AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,2-Dibromoethane (EDB)	ND	0.010	ppm(v/v)	0.0025
Chlorobenzene	ND	0.010	ppm(v/v)	0.0025
Ethylbenzene	ND	0.010	ppm(v/v)	0.0025
Xylenes (total)	ND	0.010	ppm(v/v)	0.0040
Styrene	ND	0.010	ppm(v/v)	0.0030
Bromoform	ND	0.010	ppm(v/v)	0.0025
1,1,2,2-Tetrachloroethane	ND	0.010	ppm(v/v)	0.0025
Benzyl chloride	ND	0.050	ppm(v/v)	0.0040
4-Ethyltoluene	ND	0.010	ppm(v/v)	0.0035
1,3,5-Trimethylbenzene	ND	0.010	ppm(v/v)	0.0040
1,2,4-Trimethylbenzene	ND	0.010	ppm(v/v)	0.0025
1,3-Dichlorobenzene	ND	0.010	ppm(v/v)	0.0030
1,4-Dichlorobenzene	ND	0.010	ppm(v/v)	0.0040
1,2-Dichlorobenzene	ND	0.010	ppm(v/v)	0.0040
1,2,4-Trichloro-benzene	ND	0.10	ppm(v/v)	0.0030
Hexachlorobutadiene	ND	0.020	ppm(v/v)	0.0050
Methyl tert-butyl ether (MTBE)	ND	0.050	ppm(v/v)	0.0025

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002D_AV081502_0001

GC/MS Volatiles

Lot-Sample #: E2H160208-002 **Work Order #:** E6MN81AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: GAC0002D_AV081502_0001

GC/MS Volatiles

Lot-Sample #...:	E2H160208-002	**Work Order #...:**	E6MN82AA	**Matrix.....:**	AIR
Date Sampled...:	08/15/02 14:00	**Date Received..:**	08/15/02 21:50	**MS Run #.....:**	
Prep Date.....:	08/16/02	**Analysis Date..:**	08/16/02		
Prep Batch #...:	2228496	**Analysis Time..:**	13:45		
Dilution Factor:	83.33				
Analyst ID.....:	007319	**Instrument ID..:**	MSB		
		Method.....:	EPA-21 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Trichloroethene	4.4	0.17	ppm(v/v)	0.050

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-003 **Work Order #...:** E6MN91AA **Matrix.....:** AIR
Date Sampled...: 08/15/02 14:00 **Date Received..:** 08/15/02 21:50 **MS Run #.....:**
Prep Date.....: 08/16/02 **Analysis Date..:** 08/16/02
Prep Batch #...: 2228496 **Analysis Time..:** 13:11
Dilution Factor: 8.33
Analyst ID.....: 007319 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Total Non-Methane Hydrocarbons as Hexane	**3.5 J**	**4.2**	**ppm(v/v)**	**0.83**
Dichlorodifluoromethane	**0.0072 J**	**0.017**	**ppm(v/v)**	**0.0042**
Chloromethane	ND	0.033	ppm(v/v)	0.0083
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.017	ppm(v/v)	0.0067
Vinyl chloride	ND	0.017	ppm(v/v)	0.0067
Bromomethane	ND	0.017	ppm(v/v)	0.0083
Chloroethane	ND	0.033	ppm(v/v)	0.0067
Trichlorofluoromethane	**0.039**	**0.017**	**ppm(v/v)**	**0.0042**
1,1-Dichloroethene	**2.6**	**0.017**	**ppm(v/v)**	**0.0042**
Carbon disulfide	ND	0.083	ppm(v/v)	0.017
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.017	ppm(v/v)	0.0042
Acetone	ND	0.083	ppm(v/v)	0.017
Methylene chloride	**0.016 J**	**0.017**	**ppm(v/v)**	**0.0067**
trans-1,2-Dichloroethene	ND	0.017	ppm(v/v)	0.0042
1,1-Dichloroethane	**0.095**	**0.017**	**ppm(v/v)**	**0.0042**
Vinyl acetate	ND	0.083	ppm(v/v)	0.017
cis-1,2-Dichloroethene	ND	0.017	ppm(v/v)	0.0067
2-Butanone (MEK)	ND	0.083	ppm(v/v)	0.017
Chloroform	**0.86**	**0.017**	**ppm(v/v)**	**0.0067**
1,1,1-Trichloroethane	ND	0.017	ppm(v/v)	0.0042
Carbon tetrachloride	ND	0.017	ppm(v/v)	0.0042
Benzene	ND	0.017	ppm(v/v)	0.0067
1,2-Dichloroethane	ND	0.017	ppm(v/v)	0.0067
Trichloroethene	ND	0.017	ppm(v/v)	0.0050
1,2-Dichloropropane	ND	0.017	ppm(v/v)	0.0067
Bromodichloromethane	ND	0.017	ppm(v/v)	0.0067
cis-1,3-Dichloropropene	ND	0.017	ppm(v/v)	0.0042
4-Methyl-2-pentanone (MIBK)	ND	0.083	ppm(v/v)	0.017
Toluene	ND	0.042	ppm(v/v)	0.0042
trans-1,3-Dichloropropene	ND	0.017	ppm(v/v)	0.0067
1,1,2-Trichloroethane	ND	0.017	ppm(v/v)	0.0050
Tetrachloroethene	ND	0.017	ppm(v/v)	0.0042
2-Hexanone	ND	0.25	ppm(v/v)	0.0083

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: GAC0002E_AV081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-003 **Work Order #...:** E6MN91AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dibromochloromethane	ND	0.017	ppm(v/v)	0.0042
1,2-Dibromoethane (EDB)	ND	0.017	ppm(v/v)	0.0042
Chlorobenzene	ND	0.017	ppm(v/v)	0.0042
Ethylbenzene	ND	0.017	ppm(v/v)	0.0042
Xylenes (total)	ND	0.017	ppm(v/v)	0.0067
Styrene	ND	0.017	ppm(v/v)	0.0050
Bromoform	ND	0.017	ppm(v/v)	0.0042
1,1,2,2-Tetrachloroethane	ND	0.017	ppm(v/v)	0.0042
Benzyl chloride	ND	0.083	ppm(v/v)	0.0067
4-Ethyltoluene	ND	0.017	ppm(v/v)	0.0058
1,3,5-Trimethylbenzene	ND	0.017	ppm(v/v)	0.0067
1,2,4-Trimethylbenzene	ND	0.017	ppm(v/v)	0.0042
1,3-Dichlorobenzene	ND	0.017	ppm(v/v)	0.0050
1,4-Dichlorobenzene	ND	0.017	ppm(v/v)	0.0067
1,2-Dichlorobenzene	ND	0.017	ppm(v/v)	0.0067
1,2,4-Trichloro-benzene	ND	0.17	ppm(v/v)	0.0050
Hexachlorobutadiene	ND	0.033	ppm(v/v)	0.0083
Methyl tert-butyl ether (MTBE)	ND	0.083	ppm(v/v)	0.0042

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

GAC0002E_AV081502_0001

GC/MS Volatiles

Lot-Sample #: E2H160208-003 **Work Order #:** E6MN91AA **Matrix:** AIR

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ppm(v/v)

HALEY & ALDRICH INC

Client Sample ID: HA_160_081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-004 **Work Order #...:** E6MPA1AA **Matrix.....:** WATER
Date Sampled...: 08/15/02 12:00 **Date Received..:** 08/15/02 21:50 **MS Run #.....:** 2231147
Prep Date.....: 08/16/02 **Analysis Date..:** 08/16/02
Prep Batch #...: 2231296 **Analysis Time..:** 20:25
Dilution Factor: 1
Analyst ID.....: 004648 **Instrument ID..:** MSC
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	1.0	ug/L	0.40
Chloromethane	ND	2.0	ug/L	0.30
Vinyl chloride	ND	0.50	ug/L	0.30
Chloroethane	ND	2.0	ug/L	0.30
Bromomethane	ND	2.0	ug/L	1.0
Trichlorofluoromethane	ND	2.0	ug/L	0.30
1,1-Dichloroethene	ND	1.0	ug/L	0.30
Methylene chloride	ND	1.0	ug/L	0.30
Methyl tert-butyl ether	**4.4**	**1.0**	**ug/L**	**0.50**
Carbon disulfide	ND	1.0	ug/L	0.30
Acetone	ND	10	ug/L	3.0
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.30
1,1-Dichloroethane	ND	1.0	ug/L	0.20
2,2-Dichloropropane	ND	1.0	ug/L	0.30
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.30
Chloroform	ND	1.0	ug/L	0.30
Bromochloromethane	ND	1.0	ug/L	0.30
1,1,1-Trichloroethane	ND	1.0	ug/L	0.20
2-Butanone	ND	5.0	ug/L	3.0
1,1-Dichloropropene	ND	1.0	ug/L	0.30
Carbon tetrachloride	ND	0.50	ug/L	0.30
1,2-Dibromoethane	ND	1.0	ug/L	0.30
Benzene	ND	1.0	ug/L	0.30
Trichloroethene	ND	1.0	ug/L	0.30
Bromodichloromethane	ND	1.0	ug/L	0.30
4-Methyl-2-pentanone	ND	5.0	ug/L	3.0
Toluene	ND	1.0	ug/L	0.30
1,1,2-Trichloroethane	ND	1.0	ug/L	0.30
1,2-Dichloroethane	ND	0.50	ug/L	0.40
Tetrachloroethene	ND	1.0	ug/L	0.30
2-Hexanone	ND	5.0	ug/L	3.0
Dibromochloromethane	ND	1.0	ug/L	0.40
Chlorobenzene	ND	1.0	ug/L	0.30
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.30
Ethylbenzene	ND	1.0	ug/L	0.20
Xylenes (total)	ND	1.0	ug/L	0.80
Styrene	ND	1.0	ug/L	0.30

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: HA_160_081502_0001

GC/MS Volatiles

Lot-Sample #...: E2H160208-004 **Work Order #...:** E6MPA1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromoform	ND	1.0	ug/L	0.30
Isopropylbenzene	ND	1.0	ug/L	0.30
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.40
1,2,3-Trichloropropane	ND	1.0	ug/L	0.40
n-Propylbenzene	ND	1.0	ug/L	0.40
Bromobenzene	ND	1.0	ug/L	0.30
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.20
2-Chlorotoluene	ND	1.0	ug/L	0.30
4-Chlorotoluene	ND	1.0	ug/L	0.30
tert-Butylbenzene	ND	1.0	ug/L	0.20
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.30
sec-Butylbenzene	ND	1.0	ug/L	0.30
p-Isopropyltoluene	ND	1.0	ug/L	0.30
1,3-Dichlorobenzene	ND	1.0	ug/L	0.30
1,4-Dichlorobenzene	ND	1.0	ug/L	0.30
n-Butylbenzene	ND	1.0	ug/L	0.30
1,2-Dichlorobenzene	ND	1.0	ug/L	0.30
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.70
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.30
Hexachlorobutadiene	ND	1.0	ug/L	0.30
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.40
Acrolein	ND	20	ug/L	12
Tert-amyl methyl ether	ND	2.0	ug/L	0.50
Acrylonitrile	ND	20	ug/L	10
Tert-butyl ethyl ether	ND	2.0	ug/L	0.50
t-Butanol	ND	25	ug/L	6.0
Iodomethane	ND	2.0	ug/L	1.0
Isopropyl ether	ND	2.0	ug/L	0.50
2-Chloroethyl vinyl ether	ND	5.0	ug/L	2.0
Tetrahydrofuran	ND	10	ug/L	2.0
Vinyl acetate	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(75 - 130)
1,2-Dichloroethane-d4	100	(65 - 135)
Toluene-d8	90	(80 - 130)

HALEY & ALDRICH INC

HA_160_081502_0001

GC/MS Volatiles

Lot-Sample #: E2H160208-004 **Work Order #:** E6MPA1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

QC DATA ASSOCIATION SUMMARY

E2H160208

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AIR	EPA-21 TO-14A		2228496	
002	AIR	EPA-21 TO-14A		2228496	
003	AIR	EPA-21 TO-14A		2228496	
004	WATER	SW846 8260B		2231296	2231147

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H160208 **Work Order #...:** E6PAG1AA **Matrix.....:** AIR
MB Lot-Sample #: M2H160000-496

Prep Date.....: 08/16/02 **Analysis Time..:** 12:05
Analysis Date..: 08/16/02 **Prep Batch #...:** 2228496 **Instrument ID..:** MSB
Dilution Factor: 1

Analyst ID.....: 007319

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Non-Methane Hydroca	ND	0.50	ppm(v/v)	EPA-21 TO-14A
Dichlorodifluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloromethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromomethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chloroethane	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Trichlorofluoromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon disulfide	ND	0.010	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Acetone	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Methylene chloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
trans-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Vinyl acetate	ND	0.010	ppm(v/v)	EPA-21 TO-14A
cis-1,2-Dichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Butanone (MEK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Chloroform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,1-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Carbon tetrachloride	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Trichloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichloropropane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromodichloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
cis-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
trans-1,3-Dichloropropene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2-Trichloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Tetrachloroethene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
2-Hexanone	ND	0.030	ppm(v/v)	EPA-21 TO-14A
Dibromochloromethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dibromoethane (EDB)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Chlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H160208 **Work Order #...:** E6PAG1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Styrene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Bromoform	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzyl chloride	ND	0.010	ppm(v/v)	EPA-21 TO-14A
4-Ethyltoluene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3,5-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trimethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,3-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,4-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2-Dichlorobenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
1,2,4-Trichloro-benzene	ND	0.020	ppm(v/v)	EPA-21 TO-14A
Hexachlorobutadiene	ND	0.0040	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.010	ppm(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 #...: E2H160208 **Work Order #...:** E6QQG1AA **Matrix.....:** WATER
MB Lot-Sample #: E2H190000-296

Prep Date.....: 08/16/02 **Analysis Time..:** 18:56
Analysis Date..: 08/16/02 **Prep Batch #...:** 2231296 **Instrument ID..:** MSC
Dilution Factor: 1

Analyst ID.....: 004648

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	0.50	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	0.50	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	0.50	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H160208 **Work Order #...:** E6QQG1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	25	ug/L	SW846 8260B
Iodomethane	ND	2.0	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
2-Chloroethyl vinyl ether	ND	5.0	ug/L	SW846 8260B
Tetrahydrofuran	ND	10	ug/L	SW846 8260B
Vinyl acetate	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(75 - 130)
1,2-Dichloroethane-d4	98	(65 - 135)
Toluene-d8	88	(80 - 130)

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 #...: E2H160208 Work Order #...: E6PAG1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2H160000-496 E6PAG1AD-LCSD
Prep Date.....: 08/16/02 Analysis Date..: 08/16/02
Prep Batch #...: 2228496 Analysis Time..: 11:00
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 007319

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	105	(70 - 125)			EPA-21 TO-14A
	106	(70 - 125)	1.3	(0-20)	EPA-21 TO-14A
Methylene chloride	94	(75 - 120)			EPA-21 TO-14A
	96	(75 - 120)	1.7	(0-20)	EPA-21 TO-14A
Trichloroethene	94	(80 - 125)			EPA-21 TO-14A
	95	(80 - 125)	1.3	(0-20)	EPA-21 TO-14A
Toluene	101	(70 - 120)			EPA-21 TO-14A
	103	(70 - 120)	1.8	(0-20)	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	100	(70 - 130)			EPA-21 TO-14A
	100	(70 - 130)	0.61	(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 #...: E2H160208 Work Order #...: E6PAG1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M2H160000-496 E6PAG1AD-LCSD
Prep Date.....: 08/16/02 Analysis Date..: 08/16/02
Prep Batch #...: 2228496 Analysis Time..: 11:00
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 007319

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	0.0592	0.0618	ppm(v/v)	105		EPA-21 TO-14A
	0.0592	0.0626	ppm(v/v)	106	1.3	EPA-21 TO-14A
Methylene chloride	0.0587	0.0552	ppm(v/v)	94		EPA-21 TO-14A
	0.0587	0.0562	ppm(v/v)	96	1.7	EPA-21 TO-14A
Trichloroethene	0.0594	0.0558	ppm(v/v)	94		EPA-21 TO-14A
	0.0594	0.0566	ppm(v/v)	95	1.3	EPA-21 TO-14A
Toluene	0.0557	0.0564	ppm(v/v)	101		EPA-21 TO-14A
	0.0557	0.0575	ppm(v/v)	103	1.8	EPA-21 TO-14A
1,1,2,2-Tetrachloroethane	0.0554	0.0552	ppm(v/v)	100		EPA-21 TO-14A
	0.0554	0.0556	ppm(v/v)	100	0.61	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 #...: E2H160208 **Work Order #...:** E6QQG1AC **Matrix.....:** WATER
LCS Lot-Sample#: E2H190000-296
Prep Date.....: 08/16/02 **Analysis Date..:** 08/16/02
Prep Batch #...: 2231296 **Analysis Time..:** 17:57
Dilution Factor: 1 **Instrument ID..:** MSC
Analyst ID.....: 004648

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**102**	**(70 - 140)**	**SW846 8260B**
Benzene	**96**	**(75 - 120)**	**SW846 8260B**
Trichloroethene	**105**	**(70 - 130)**	**SW846 8260B**
Toluene	**94**	**(75 - 125)**	**SW846 8260B**
Chlorobenzene	**95**	**(75 - 120)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(75 - 130)
1,2-Dichloroethane-d4	92	(65 - 135)
Toluene-d8	95	(80 - 130)

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 #...: E2H160208 **Work Order #...:** E6QQG1AC **Matrix.....:** WATER
LCS Lot-Sample#: E2H190000-296
Prep Date.....: 08/16/02 **Analysis Date..:** 08/16/02
Prep Batch #...: 2231296 **Analysis Time..:** 17:57
Dilution Factor: 1 **Instrument ID..:** MSC
Analyst ID.....: 004648

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**10.0**	**10.2**	**ug/L**	**102**	**SW846 8260B**
Benzene	**10.0**	**9.61**	**ug/L**	**96**	**SW846 8260B**
Trichloroethene	**10.0**	**10.5**	**ug/L**	**105**	**SW846 8260B**
Toluene	**10.0**	**9.44**	**ug/L**	**94**	**SW846 8260B**
Chlorobenzene	**10.0**	**9.47**	**ug/L**	**95**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	106	(75 - 130)
1,2-Dichloroethane-d4	92	(65 - 135)
Toluene-d8	95	(80 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E2H160208	**Work Order #...:**	E6MP31AC-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	E2H160209-004		E6MP31AD-MSD		
Date Sampled...:	08/15/02 07:59	**Date Received..:**	08/16/02 10:30	**MS Run #.....:**	2231147
Prep Date.....:	08/17/02	**Analysis Date..:**	08/17/02		
Prep Batch #...:	2231296	**Analysis Time..:**	04:16		
Dilution Factor:	1	**Analyst ID.....:**	004648	**Instrument ID..:**	MSC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**98**	**(70 - 140)**			**SW846 8260B**
	100	**(70 - 140)**	**2.1**	**(0-25)**	**SW846 8260B**
Benzene	**97**	**(75 - 120)**			**SW846 8260B**
	95	**(75 - 120)**	**2.3**	**(0-25)**	**SW846 8260B**
Trichloroethene	**108**	**(70 - 130)**			**SW846 8260B**
	105	**(70 - 130)**	**2.5**	**(0-25)**	**SW846 8260B**
Toluene	**93**	**(75 - 125)**			**SW846 8260B**
	92	**(75 - 125)**	**0.32**	**(0-25)**	**SW846 8260B**
Chlorobenzene	**94**	**(75 - 120)**			**SW846 8260B**
	93	**(75 - 120)**	**0.64**	**(0-25)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	110	(75 - 130)
	108	(75 - 130)
1,2-Dichloroethane-d4	103	(65 - 135)
	104	(65 - 135)
Toluene-d8	90	(80 - 130)
	89	(80 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2H160208 **Work Order #...:** E6MP31AC-MS **Matrix.....:** WATER
MS Lot-Sample #: E2H160209-004 E6MP31AD-MSD
Date Sampled...: 08/15/02 07:59 **Date Received..:** 08/16/02 10:30 **MS Run #.....:** 2231147
Prep Date.....: 08/17/02 **Analysis Date..:** 08/17/02
Prep Batch #...: 2231296 **Analysis Time..:** 04:16
Dilution Factor: 1 **Analyst ID.....:** 004648 **Instrument ID..:** MSC

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**10.0**	**9.79**	**ug/L**	**98**		**SW846 8260B**
	ND	**10.0**	**10.0**	**ug/L**	**100**	**2.1**	**SW846 8260B**
Benzene	**ND**	**10.0**	**9.71**	**ug/L**	**97**		**SW846 8260B**
	ND	**10.0**	**9.49**	**ug/L**	**95**	**2.3**	**SW846 8260B**
Trichloroethene	**ND**	**10.0**	**10.8**	**ug/L**	**108**		**SW846 8260B**
	ND	**10.0**	**10.5**	**ug/L**	**105**	**2.5**	**SW846 8260B**
Toluene	**ND**	**10.0**	**9.26**	**ug/L**	**93**		**SW846 8260B**
	ND	**10.0**	**9.23**	**ug/L**	**92**	**0.32**	**SW846 8260B**
Chlorobenzene	**ND**	**10.0**	**9.40**	**ug/L**	**94**		**SW846 8260B**
	ND	**10.0**	**9.34**	**ug/L**	**93**	**0.64**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	110	(75 - 130)
	108	(75 - 130)
1,2-Dichloroethane-d4	103	(65 - 135)
	104	(65 - 135)
Toluene-d8	90	(80 - 130)
	89	(80 - 130)

NOTE(S):

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

Bold print denotes control parameters

ANALYTICAL REPORT

BRC C-6, Torrance HaleyAldrich

Lot #: E2H010352

Scott Zachary

Haley & Aldrich Inc

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

August 14, 2002

EXECUTIVE SUMMARY - Detection Highlights

E2H010352

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
2_VEW_20_SSC080102_0001 08/01/02 10:00 009				
1,2-Dichloroethane	1.2 J	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	4.9 J	5.0	ug/kg	SW846 8260B
SB1000_SSC080102_0001 08/01/02 09:00 012				
Trichloroethene	3.6 J	5.0	ug/kg	SW846 8260B
SB1001_SSB080102_0001 08/01/02 13:00 014				
Acetone	890 J,B	1200	ug/kg	SW846 8260B
Trichloroethene	380	250	ug/kg	SW846 8260B
Tetrachloroethene	330	250	ug/kg	SW846 8260B
Ethylbenzene	390	250	ug/kg	SW846 8260B
Xylenes (total)	1000	250	ug/kg	SW846 8260B
Isopropylbenzene	340	250	ug/kg	SW846 8260B
p-Isopropyltoluene	900	250	ug/kg	SW846 8260B
n-Propylbenzene	900	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	2600	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	7700	250	ug/kg	SW846 8260B
sec-Butylbenzene	590	250	ug/kg	SW846 8260B
n-Butylbenzene	1900	250	ug/kg	SW846 8260B
SB1001_SSC080102_0001 08/01/02 13:00 015				
Trichloroethene	7.0	5.0	ug/kg	SW846 8260B
Tetrachloroethene	2.0 J	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	3.1 J	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	7.6	5.0	ug/kg	SW846 8260B
SP39_SSA080102_0001 08/01/02 13:00 016				
C12-C13	5.2 J	10	mg/kg	SW846 8015B
C14-C15	11	10	mg/kg	SW846 8015B
C16-C17	12	10	mg/kg	SW846 8015B
C18-C19	9.6 J	10	mg/kg	SW846 8015B
C20-C23	15	10	mg/kg	SW846 8015B
C24-C27	8.6 J	10	mg/kg	SW846 8015B
C28-C31	6.6 J	10	mg/kg	SW846 8015B
C32-C35	5.4 J	10	mg/kg	SW846 8015B
Total Carbon Chain Range	73	10	mg/kg	SW846 8015B
Mercury	0.020 B	0.10	mg/kg	SW846 7471A
Aluminum	20600	20.0	mg/kg	SW846 6010B
Arsenic	6.0	1.0	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E2H010352

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SP39_SSA080102_0001 08/01/02 13:00 016				
Barium	125	2.0	mg/kg	SW846 6010B
Chromium	28.0	1.0	mg/kg	SW846 6010B
Beryllium	0.61	0.50	mg/kg	SW846 6010B
Lead	5.7	0.50	mg/kg	SW846 6010B
Selenium	0.56	0.50	mg/kg	SW846 6010B
Cobalt	10.2	5.0	mg/kg	SW846 6010B
Copper	26.3	2.5	mg/kg	SW846 6010B
Molybdenum	1.1 B	4.0	mg/kg	SW846 6010B
Nickel	18.3	4.0	mg/kg	SW846 6010B
Vanadium	51.2	5.0	mg/kg	SW846 6010B
Zinc	66.5	2.0	mg/kg	SW846 6010B
SP39_SSB080102_0001 08/01/02 13:00 017				
C28-C31	2.1 J	10	mg/kg	SW846 8015B
C32-C35	3.2 J	10	mg/kg	SW846 8015B
C36-C39	2.1 J	10	mg/kg	SW846 8015B
Total Carbon Chain Range	7.4 J	10	mg/kg	SW846 8015B
Mercury	0.043 B	0.10	mg/kg	SW846 7471A
Aluminum	11500	20.0	mg/kg	SW846 6010B
Arsenic	6.5	1.0	mg/kg	SW846 6010B
Barium	55.7	2.0	mg/kg	SW846 6010B
Chromium	21.7	1.0	mg/kg	SW846 6010B
Beryllium	0.39 B	0.50	mg/kg	SW846 6010B
Lead	4.0	0.50	mg/kg	SW846 6010B
Cobalt	6.1	5.0	mg/kg	SW846 6010B
Copper	13.4	2.5	mg/kg	SW846 6010B
Molybdenum	1.1 B	4.0	mg/kg	SW846 6010B
Nickel	11.5	4.0	mg/kg	SW846 6010B
Vanadium	33.0	5.0	mg/kg	SW846 6010B
Zinc	35.3	2.0	mg/kg	SW846 6010B

METHODS SUMMARY

E2H010352

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E2H010352

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E5RFP	001	2_VEW_18_SSA080102_0001	08/01/02	09:00
E5RF4	002	2_VEW_18_SSB080102_0001	08/01/02	09:00
E5RGE	003	2_VEW_18_SSC080102_0001	08/01/02	09:00
E5RGF	004	2_VEW_19_SSA080102_0001	08/01/02	10:00
E5RGK	005	2_VEW_19_SSB080102_0001	08/01/02	10:00
E5RGM	006	2_VEW_19_SSC080102_0001	08/01/02	10:00
E5RGN	007	2_VEW_20_SSA080102_0001	08/01/02	10:00
E5RGQ	008	2_VEW_20_SSB080102_0001	08/01/02	10:00
E5RGR	009	2_VEW_20_SSC080102_0001	08/01/02	10:00
E5RGV	010	SB1000_SSA080102_0001	08/01/02	09:00
E5RG1	011	SB1000_SSB080102_0001	08/01/02	09:00
E5RG4	012	SB1000_SSC080102_0001	08/01/02	09:00
E5RG9	013	SB1001_SSA080102_0001	08/01/02	13:00
E5RHC	014	SB1001_SSB080102_0001	08/01/02	13:00
E5RHD	015	SB1001_SSC080102_0001	08/01/02	13:00
E5RHE	016	SP39_SSA080102_0001	08/01/02	13:00
E5RHJ	017	SP39_SSB080102_0001	08/01/02	13:00

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.

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_18_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-001 **Work Order #...:** E5RFP1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 22:03
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_18_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-001 **Work Order #...:** E5RFP1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(65 - 135)
1,2-Dichloroethane-d4	85	(60 - 140)
Toluene-d8	88	(70 - 130)

HALEY & ALDRICH INC

2_VEW_18_SSA080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-001 **Work Order #:** E5RFP1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_18_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-002 **Work Order #...:** E5RF41AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2218096
Prep Date.....: 08/05/02 **Analysis Date..:** 08/05/02
Prep Batch #...: 2218248 **Analysis Time..:** 16:49
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_18_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-002 **Work Order #...:** E5RF41AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	5.7 *	(65 - 135)
1,2-Dichloroethane-d4	18 *	(60 - 140)
Toluene-d8	4.0 *	(70 - 130)

NOTE(S):

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

* Surrogate recovery is outside stated control limits.

HALEY & ALDRICH INC

2_VEW_18_SSB080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-002 **Work Order #:** E5RF41AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_18_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-003 **Work Order #...:** E5RGE1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 20:01
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_18_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-003 **Work Order #...:** E5RGE1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(65 - 135)
1,2-Dichloroethane-d4	92	(60 - 140)
Toluene-d8	98	(70 - 130)

HALEY & ALDRICH INC

2_VEW_18_SSC080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-003 **Work Order #:** E5RGE1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_19_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-004 **Work Order #...:** E5RGF1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 21:32
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_19_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-004 **Work Order #...:** E5RGF1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(65 - 135)
1,2-Dichloroethane-d4	91	(60 - 140)
Toluene-d8	92	(70 - 130)

HALEY & ALDRICH INC

2_VEW_19_SSA080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-004 **Work Order #:** E5RGF1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_19_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-005 **Work Order #...:** E5RGK1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 22:33
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_19_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-005 **Work Order #...:** E5RGK1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	87	(65 - 135)
1,2-Dichloroethane-d4	93	(60 - 140)
Toluene-d8	92	(70 - 130)

HALEY & ALDRICH INC

2_VEW_19_SSB080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-005 **Work Order #:** E5RGK1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_19_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-006 **Work Order #...:** E5RGM1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 23:04
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_19_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-006 **Work Order #...:** E5RGM1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	90	(65 - 135)
1,2-Dichloroethane-d4	99	(60 - 140)
Toluene-d8	91	(70 - 130)

HALEY & ALDRICH INC

2_VEW_19_SSC080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-006 **Work Order #:** E5RGM1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_20_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-007 **Work Order #...:** E5RGN1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220089
Prep Date.....: 08/07/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2220252 **Analysis Time..:** 12:59
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_20_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-007 **Work Order #...:** E5RGN1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	96	(65 - 135)
1,2-Dichloroethane-d4	75	(60 - 140)
Toluene-d8	72	(70 - 130)

HALEY & ALDRICH INC

2_VEW_20_SSA080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-007 **Work Order #:** E5RGN1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_20_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-008 **Work Order #...:** E5RGQ1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 00:04
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_20_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-008 **Work Order #...:** E5RGQ1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	93	(65 - 135)
1,2-Dichloroethane-d4	103	(60 - 140)
Toluene-d8	93	(70 - 130)

HALEY & ALDRICH INC

2_VEW_20_SSB080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-008 **Work Order #:** E5RGQ1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_20_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-009 **Work Order #...:** E5RGR1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 00:35
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	**1.2 J**	**5.0**	**ug/kg**	**1.0**
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: 2_VEW_20_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-009 **Work Order #...:** E5RGR1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	**4.9 J**	**5.0**	**ug/kg**	**3.0**
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	94	(65 - 135)
1,2-Dichloroethane-d4	102	(60 - 140)
Toluene-d8	94	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

2_VEW_20_SSC080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-009 **Work Order #:** E5RGR1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: SB1000_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-010 **Work Order #...:** E5RGV1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 01:05
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SB1000_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-010 **Work Order #...:** E5RGV1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	88	(65 - 135)
1,2-Dichloroethane-d4	99	(60 - 140)
Toluene-d8	90	(70 - 130)

HALEY & ALDRICH INC

SB1000_SSA080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-010 **Work Order #:** E5RGV1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: SB1000_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-011 **Work Order #...:** E5RG11AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 01:35
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SB1000_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-011 **Work Order #...:** E5RG11AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	91	(65 - 135)
1,2-Dichloroethane-d4	112	(60 - 140)
Toluene-d8	94	(70 - 130)

HALEY & ALDRICH INC

SB1000_SSB080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-011 **Work Order #:** E5RG11AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: SB1000_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-012 **Work Order #...:** E5RG41AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 02:06
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	**3.6 J**	**5.0**	**ug/kg**	**2.0**
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SB1000_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-012 **Work Order #...:** E5RG41AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	91	(65 - 135)
1,2-Dichloroethane-d4	110	(60 - 140)
Toluene-d8	93	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

SB1000_SSC080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-012 **Work Order #:** E5RG41AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: SB1001_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-013 **Work Order #...:** E5RG91AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 02:36
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SB1001_SSA080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-013 **Work Order #...:** E5RG91AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	94	(65 - 135)
1,2-Dichloroethane-d4	115	(60 - 140)
Toluene-d8	95	(70 - 130)

HALEY & ALDRICH INC

SB1001_SSA080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-013 **Work Order #:** E5RG91AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

HALEY & ALDRICH INC

Client Sample ID: SB1001_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-014 **Work Order #...:** E5RHC1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2225151
Prep Date.....: 08/06/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2225371 **Analysis Time..:** 19:08
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	500	ug/kg	170
Chloromethane	ND	500	ug/kg	200
Vinyl chloride	ND	500	ug/kg	150
Bromomethane	ND	500	ug/kg	250
1,2-Dibromoethane	ND	250	ug/kg	70
Chloroethane	ND	500	ug/kg	250
Trichlorofluoromethane	ND	500	ug/kg	70
Acrolein	ND	5000	ug/kg	2000
1,1-Dichloroethene	ND	250	ug/kg	120
Iodomethane	ND	500	ug/kg	250
Acetone	**890 J,B**	**1200**	**ug/kg**	**400**
Carbon disulfide	ND	250	ug/kg	120
Methylene chloride	ND	250	ug/kg	50
trans-1,2-Dichloroethene	ND	250	ug/kg	120
Acrylonitrile	ND	5000	ug/kg	2000
Methyl tert-butyl ether	ND	250	ug/kg	100
1,1-Dichloroethane	ND	250	ug/kg	100
Vinyl acetate	ND	500	ug/kg	380
2,2-Dichloropropane	ND	250	ug/kg	100
cis-1,2-Dichloroethene	ND	250	ug/kg	120
2-Butanone	ND	1200	ug/kg	700
Bromochloromethane	ND	250	ug/kg	110
Chloroform	ND	250	ug/kg	70
Tetrahydrofuran	ND	1000	ug/kg	500
1,1,1-Trichloroethane	ND	250	ug/kg	180
1,1-Dichloropropene	ND	250	ug/kg	100
Carbon tetrachloride	ND	250	ug/kg	100
Benzene	ND	250	ug/kg	100
1,2-Dichloroethane	ND	250	ug/kg	70
Trichloroethene	**380**	**250**	**ug/kg**	**70**
1,2-Dichloropropane	ND	250	ug/kg	100
Bromodichloromethane	ND	250	ug/kg	100
2-Chloroethyl vinyl ether	ND	500	ug/kg	350
cis-1,3-Dichloropropene	ND	250	ug/kg	100
4-Methyl-2-pentanone	ND	1200	ug/kg	400
Toluene	ND	250	ug/kg	60
trans-1,3-Dichloropropene	ND	250	ug/kg	70

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SB1001_SSB080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-014 **Work Order #...:** E5RHC1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	250	ug/kg	100
Tetrachloroethene	**330**	**250**	**ug/kg**	**80**
2-Hexanone	ND	1200	ug/kg	350
Dibromochloromethane	ND	250	ug/kg	110
Chlorobenzene	ND	250	ug/kg	100
Ethylbenzene	**390**	**250**	**ug/kg**	**70**
Xylenes (total)	**1000**	**250**	**ug/kg**	**180**
Styrene	ND	500	ug/kg	100
Bromoform	ND	250	ug/kg	100
Isopropylbenzene	**340**	**250**	**ug/kg**	**120**
p-Isopropyltoluene	**900**	**250**	**ug/kg**	**70**
Bromobenzene	ND	250	ug/kg	70
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	60
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	100
1,2,3-Trichloropropane	ND	250	ug/kg	110
n-Propylbenzene	**900**	**250**	**ug/kg**	**110**
2-Chlorotoluene	ND	250	ug/kg	70
4-Chlorotoluene	ND	250	ug/kg	70
1,3,5-Trimethylbenzene	**2600**	**250**	**ug/kg**	**120**
tert-Butylbenzene	ND	250	ug/kg	70
1,2,4-Trimethylbenzene	**7700**	**250**	**ug/kg**	**70**
sec-Butylbenzene	**590**	**250**	**ug/kg**	**70**
1,3-Dichlorobenzene	ND	250	ug/kg	70
1,4-Dichlorobenzene	ND	250	ug/kg	100
1,2-Dichlorobenzene	ND	250	ug/kg	100
n-Butylbenzene	**1900**	**250**	**ug/kg**	**70**
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	150
1,2,4-Trichloro-benzene	ND	250	ug/kg	70
Hexachlorobutadiene	ND	250	ug/kg	70
1,2,3-Trichlorobenzene	ND	250	ug/kg	70
t-Butanol	ND	5000	ug/kg	2500
Isopropyl ether	ND	500	ug/kg	100
Tert-amyl methyl ether	ND	500	ug/kg	100
Tert-butyl ethyl ether	ND	500	ug/kg	100

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(60 - 140)
1,2-Dichloroethane-d4	97	(60 - 140)
Toluene-d8	93	(60 - 140)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

HALEY & ALDRICH INC

SB1001_SSB080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-014 **Work Order #:** E5RHC1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
unknown aromatic hydrocarbon		8900	M	16.178	ug/kg
unknown aromatic hydrocarbon		8100	M	17.94	ug/kg
unknown aromatic hydrocarbon		13000	M	18.403	ug/kg
unknown aromatic hydrocarbon		7600	M	19.17	ug/kg
unknown aromatic hydrocarbon		5300	M	20.263	ug/kg
unknown aromatic hydrocarbon		21000	M	21.1	ug/kg
unknown Naphthalene		6200	M	21.395	ug/kg
unknown Naphthalene		13000	M	23.443	ug/kg
unknown Naphthalene		31000	M	24.113	ug/kg
unknown Naphthalene		13000	M	24.29	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Client Sample ID: SB1001_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-015 **Work Order #...:** E5RHD1AA **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/03/02
Prep Batch #...: 2220270 **Analysis Time..:** 03:36
Dilution Factor: 1
Analyst ID.....: 999998 **Instrument ID..:** MSD
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	8.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	10
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	3.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	2.0
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	**7.0**	**5.0**	**ug/kg**	**2.0**
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SB1001_SSC080102_0001

GC/MS Volatiles

Lot-Sample #...: E2H010352-015 **Work Order #...:** E5RHD1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	**2.0 J**	**5.0**	**ug/kg**	**2.0**
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	1.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	**3.1 J**	**5.0**	**ug/kg**	**2.0**
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	**7.6**	**5.0**	**ug/kg**	**2.0**
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	128	(65 - 135)
1,2-Dichloroethane-d4	96	(60 - 140)
Toluene-d8	87	(70 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

SB1001_SSC080102_0001

GC/MS Volatiles

Lot-Sample #: E2H010352-015 **Work Order #:** E5RHD1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown aromatic		140	M	17.382	ug/kg
Unknown alkane		420	M	18.82	ug/kg
Unknown cycloalkane		92	M	19.952	ug/kg
Unknown aromatic		67	M	20.11	ug/kg
Unknown alkane		380	M	21.399	ug/kg
Unknown cycloalkane		70	M	22.108	ug/kg
Unknown alkane		940	M	23.152	ug/kg
Unknown cycloalkane		140	M	23.9	ug/kg
Unknown alkane		410	M	24.087	ug/kg
Unknown alkane		330	M	24.284	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

HALEY & ALDRICH INC

Client Sample ID: SP39_SSA080102_0001

GC Volatiles

Lot-Sample #...:	E2H010352-016	**Work Order #...:**	E5RHE1AC	**Matrix.....:**	SOLID
Date Sampled...:	08/01/02 13:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2217161
Prep Date.....:	08/02/02	**Analysis Date..:**	08/02/02		
Prep Batch #...:	2217325	**Analysis Time..:**	16:40		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	91	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP39_SSA080102_0001

GC Semivolatiles

Lot-Sample #...:	E2H010352-016	**Work Order #...:**	E5RHE1AA	**Matrix.....:**	SOLID
Date Sampled...:	08/01/02 13:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2214105
Prep Date.....:	08/02/02	**Analysis Date..:**	08/05/02		
Prep Batch #...:	2214273	**Analysis Time..:**	17:15		
Dilution Factor:	1				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	2.0
C10-C11	ND	10	mg/kg	2.0
C12-C13	**5.2 J**	**10**	**mg/kg**	**2.0**
C14-C15	**11**	**10**	**mg/kg**	**2.0**
C16-C17	**12**	**10**	**mg/kg**	**2.0**
C18-C19	**9.6 J**	**10**	**mg/kg**	**2.0**
C20-C23	**15**	**10**	**mg/kg**	**2.0**
C24-C27	**8.6 J**	**10**	**mg/kg**	**2.0**
C28-C31	**6.6 J**	**10**	**mg/kg**	**2.0**
C32-C35	**5.4 J**	**10**	**mg/kg**	**2.0**
C36-C39	ND	10	mg/kg	2.0
C40+	ND	10	mg/kg	2.0
Total Carbon Chain Range	**73**	**10**	**mg/kg**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	97	(60 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP39_SSA080102_0001

TOTAL Metals

Lot-Sample #...: E2H010352-016 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2214218						
Aluminum	**20600**	**20.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AE**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 8.0	
Arsenic	**6.0**	**1.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AF**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/02-08/05/02	E5RHE1AG
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.60	
Barium	**125**	**2.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AH**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5RHE1AJ
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.060	
Chromium	**28.0**	**1.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AK**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Beryllium	**0.61**	**0.50**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AL**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.050	
Lead	**5.7**	**0.50**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AM**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.30	
Selenium	**0.56**	**0.50**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AN**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP39_SSA080102_0001

TOTAL Metals

Lot-Sample #...: E2H010352-016 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5RHE1AP
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Cobalt	**10.2**	**5.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AQ**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Copper	**26.3**	**2.5**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AR**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.40	
Molybdenum	**1.1 B**	**4.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AT**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.30	
Nickel	**18.3**	**4.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AU**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5RHE1AV
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.80	
Vanadium	**51.2**	**5.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AW**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Zinc	**66.5**	**2.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHE1AX**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 1.0	

Prep Batch #...: 2214226

Mercury	**0.020 B**	**0.10**	**mg/kg**	**SW846 7471A**	**08/02/02**	**E5RHE1A0**
		Dilution Factor: 1		Analysis Time..: 14:00	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2214073	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP39_SSB080102_0001

GC Volatiles

Lot-Sample #...:	E2H010352-017	**Work Order #...:**	E5RHJ1AD	**Matrix.....:**	SOLID
Date Sampled...:	08/01/02 13:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2217161
Prep Date.....:	08/02/02	**Analysis Date..:**	08/02/02		
Prep Batch #...:	2217325	**Analysis Time..:**	17:08		
Dilution Factor:	1				
Analyst ID.....:	001464	**Instrument ID..:**	G13		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	90	(60 - 130)

HALEY & ALDRICH INC

Client Sample ID: SP39_SSB080102_0001

GC Semivolatiles

Lot-Sample #...:	E2H010352-017	**Work Order #...:**	E5RHJ1AC	**Matrix.....:**	SOLID
Date Sampled...:	08/01/02 13:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2214105
Prep Date.....:	08/02/02	**Analysis Date..:**	08/05/02		
Prep Batch #...:	2214273	**Analysis Time..:**	17:54		
Dilution Factor:	1				
Analyst ID.....:	356074	**Instrument ID..:**	G02		
		Method.....:	SW846 8015B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	2.0
C10-C11	ND	10	mg/kg	2.0
C12-C13	ND	10	mg/kg	2.0
C14-C15	ND	10	mg/kg	2.0
C16-C17	ND	10	mg/kg	2.0
C18-C19	ND	10	mg/kg	2.0
C20-C23	ND	10	mg/kg	2.0
C24-C27	ND	10	mg/kg	2.0
C28-C31	**2.1 J**	**10**	**mg/kg**	**2.0**
C32-C35	**3.2 J**	**10**	**mg/kg**	**2.0**
C36-C39	**2.1 J**	**10**	**mg/kg**	**2.0**
C40+	ND	10	mg/kg	2.0
Total Carbon Chain Range	**7.4 J**	**10**	**mg/kg**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	91	(60 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP39_SSB080102_0001

TOTAL Metals

Lot-Sample #...: E2H010352-017 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2214218						
Aluminum	**11500**	**20.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AF**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 8.0	
Arsenic	**6.5**	**1.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AG**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	08/02-08/05/02	E5RHJ1AH
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.60	
Barium	**55.7**	**2.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AJ**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5RHJ1AK
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.060	
Chromium	**21.7**	**1.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AL**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Beryllium	**0.39 B**	**0.50**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AM**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.050	
Lead	**4.0**	**0.50**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AN**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5RHJ1AP
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.40	

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP39_SSB080102_0001

TOTAL Metals

Lot-Sample #...: E2H010352-017 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5RHJ1AQ
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Cobalt	**6.1**	**5.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AR**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Copper	**13.4**	**2.5**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AT**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.40	
Molybdenum	**1.1 B**	**4.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AU**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.30	
Nickel	**11.5**	**4.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AV**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5RHJ1AW
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.80	
Vanadium	**33.0**	**5.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1AX**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 0.10	
Zinc	**35.3**	**2.0**	**mg/kg**	**SW846 6010B**	**08/02-08/05/02**	**E5RHJ1A0**
		Dilution Factor: 1		Analysis Time..: 14:20	Analyst ID.....: 021088	
		Instrument ID..: M01		MS Run #.....: 2214071	MDL.....: 1.0	

Prep Batch #...: 2214226

Mercury	**0.043 B**	**0.10**	**mg/kg**	**SW846 7471A**	**08/02/02**	**E5RHJ1AA**
		Dilution Factor: 1		Analysis Time..: 14:05	Analyst ID.....: 000023	
		Instrument ID..: M04		MS Run #.....: 2214073	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

E2H010352

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 8260B		2220270	2220107
002	SOLID	SW846 8260B		2218248	2218096
003	SOLID	SW846 8260B		2220270	2220107
004	SOLID	SW846 8260B		2220270	2220107
005	SOLID	SW846 8260B		2220270	2220107
006	SOLID	SW846 8260B		2220270	2220107
007	SOLID	SW846 8260B		2220252	2220089
008	SOLID	SW846 8260B		2220270	2220107
009	SOLID	SW846 8260B		2220270	2220107
010	SOLID	SW846 8260B		2220270	2220107
011	SOLID	SW846 8260B		2220270	2220107
012	SOLID	SW846 8260B		2220270	2220107
013	SOLID	SW846 8260B		2220270	2220107
014	SOLID	SW846 8260B		2225371	2225151
015	SOLID	SW846 8260B		2220270	2220107
016	SOLID	SW846 8015B		2214273	2214105
	SOLID	SW846 8015B		2217325	2217161
	SOLID	SW846 7471A		2214226	2214073
	SOLID	SW846 6010B		2214218	2214071
017	SOLID	SW846 8015B		2214273	2214105
	SOLID	SW846 8015B		2217325	2217161
	SOLID	SW846 7471A		2214226	2214073
	SOLID	SW846 6010B		2214218	2214071

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E50FG1AA **Matrix.....:** SOLID
MB Lot-Sample #: E2H060000-248

Prep Date.....: 08/05/02 **Analysis Time..:** 16:04
Analysis Date..: 08/05/02 **Prep Batch #...:** 2218248 **Instrument ID..:** MSD
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E50FG1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	95	(65 - 135)
1,2-Dichloroethane-d4	91	(60 - 140)
Toluene-d8	96	(70 - 130)

NOTE(S):

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

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2H060000-248 B **Work Order #:** E50FG1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E54KX1AA **Matrix.....:** SOLID
MB Lot-Sample #: E2H080000-252

Prep Date.....: 08/07/02 **Analysis Time..:** 12:07
Analysis Date..: 08/07/02 **Prep Batch #...:** 2220252 **Instrument ID..:** MSD
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E54KX1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(65 - 135)
1,2-Dichloroethane-d4	81	(60 - 140)
Toluene-d8	80	(70 - 130)

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E54L91AA **Matrix.....:** SOLID
MB Lot-Sample #: E2H080000-270

Prep Date.....: 08/02/02 **Analysis Time..:** 19:30
Analysis Date..: 08/02/02 **Prep Batch #...:** 2220270 **Instrument ID..:** MSD
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E54L91AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	99	(65 - 135)
1,2-Dichloroethane-d4	82	(60 - 140)
Toluene-d8	91	(70 - 130)

NOTE(S):

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

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2H080000-270 B **Work Order #:** E54L91AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E6D491AA **Matrix.....:** SOLID
MB Lot-Sample #: E2H130000-371

Prep Date.....: 08/06/02 **Analysis Time..:** 18:36
Analysis Date..: 08/07/02 **Prep Batch #...:** 2225371 **Instrument ID..:** MSD
Dilution Factor: 1

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
Chloromethane	ND	500	ug/kg	SW846 8260B
Vinyl chloride	ND	500	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Acrolein	ND	5000	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
Iodomethane	ND	500	ug/kg	SW846 8260B
Acetone	**920 J**	**1200**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
Acrylonitrile	ND	5000	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
Vinyl acetate	ND	500	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
2-Butanone	ND	1200	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Tetrahydrofuran	ND	1000	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	1200	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
2-Hexanone	ND	1200	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E6D491AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Xylenes (total)	ND	250	ug/kg	SW846 8260B
Styrene	ND	500	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	250	ug/kg	SW846 8260B
Bromobenzene	ND	250	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	250	ug/kg	SW846 8260B
n-Propylbenzene	ND	250	ug/kg	SW846 8260B
2-Chlorotoluene	ND	250	ug/kg	SW846 8260B
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
tert-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
n-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	250	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B
t-Butanol	ND	5000	ug/kg	SW846 8260B
Isopropyl ether	ND	500	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	500	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	500	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(60 - 140)
1,2-Dichloroethane-d4	105	(60 - 140)
Toluene-d8	102	(60 - 140)

NOTE(S):

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

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2H130000-371 B **Work Order #:** E6D491AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
unknown		260	M	9.704	ug/kg
unknown		280	M	11.929	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5XCW1AA **Matrix.....:** SOLID
MB Lot-Sample #: E2H050000-325

Prep Date.....: 08/02/02 **Analysis Time..:** 15:44
Analysis Date..: 08/02/02 **Prep Batch #...:** 2217325 **Instrument ID..:** G13
Dilution Factor: 1

Analyst ID.....: 001464

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C6-C8	ND	1.0	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	91	(60 - 130)

NOTE(S):

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

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E2H010352 **Work Order #...:** E5TF11AA **Matrix.....:** SOLID
MB Lot-Sample #: E2H020000-273

Prep Date.....: 08/02/02 **Analysis Time..:** 14:01
Analysis Date..: 08/05/02 **Prep Batch #...:** 2214273 **Instrument ID..:** G02
Dilution Factor: 1

Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	93	(60 - 130)

NOTE(S):

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E2H020000-218 **Prep Batch #...:** 2214218						
Aluminum	ND	20.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AA
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Arsenic	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AC
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Antimony	ND	6.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AD
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Barium	ND	2.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AE
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Cadmium	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AF
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Chromium	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AG
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Beryllium	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AH
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Lead	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AJ
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Selenium	ND	0.50	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AK
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Silver	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AL
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		
Cobalt	ND	5.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AM
		Dilution Factor: 1				
		Analysis Time..: 13:05	Analyst ID.....: 021088	Instrument ID..: M01		

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	2.5	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AN
		Dilution Factor: 1				
		Analysis Time..: 13:05		Analyst ID.....: 021088	Instrument ID..: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AP
		Dilution Factor: 1				
		Analysis Time..: 13:05		Analyst ID.....: 021088	Instrument ID..: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AQ
		Dilution Factor: 1				
		Analysis Time..: 13:05		Analyst ID.....: 021088	Instrument ID..: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AR
		Dilution Factor: 1				
		Analysis Time..: 13:05		Analyst ID.....: 021088	Instrument ID..: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AT
		Dilution Factor: 1				
		Analysis Time..: 13:05		Analyst ID.....: 021088	Instrument ID..: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	08/02-08/05/02	E5R4E1AU
		Dilution Factor: 1				
		Analysis Time..: 13:05		Analyst ID.....: 021088	Instrument ID..: M01	

MB Lot-Sample #: E2H020000-226 **Prep Batch #...:** 2214226

Mercury	ND	0.10	mg/kg	SW846 7471A	08/02/02	E5R4L1AA
		Dilution Factor: 1				
		Analysis Time..: 13:55		Analyst ID.....: 000023	Instrument ID..: M04	

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 #...: E2H010352 **Work Order #...:** E50FG1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H060000-248
Prep Date.....: 08/05/02 **Analysis Date..:** 08/05/02
Prep Batch #...: 2218248 **Analysis Time..:** 15:34
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**88**	**(65 - 150)**	**SW846 8260B**
Benzene	**95**	**(70 - 130)**	**SW846 8260B**
Trichloroethene	**92**	**(70 - 135)**	**SW846 8260B**
Toluene	**90**	**(70 - 130)**	**SW846 8260B**
Chlorobenzene	**89**	**(70 - 130)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(65 - 135)
1,2-Dichloroethane-d4	84	(60 - 140)
Toluene-d8	90	(70 - 130)

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 #...: E2H010352 **Work Order #...:** E50FG1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H060000-248
Prep Date.....: 08/05/02 **Analysis Date..:** 08/05/02
Prep Batch #...: 2218248 **Analysis Time..:** 15:34
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**50.0**	**44.0**	**ug/kg**	**88**	**SW846 8260B**
Benzene	**50.0**	**47.6**	**ug/kg**	**95**	**SW846 8260B**
Trichloroethene	**50.0**	**45.8**	**ug/kg**	**92**	**SW846 8260B**
Toluene	**50.0**	**45.0**	**ug/kg**	**90**	**SW846 8260B**
Chlorobenzene	**50.0**	**44.3**	**ug/kg**	**89**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(65 - 135)
1,2-Dichloroethane-d4	84	(60 - 140)
Toluene-d8	90	(70 - 130)

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 #...: E2H010352 **Work Order #...:** E54KX1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H080000-252
Prep Date.....: 08/07/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2220252 **Analysis Time..:** 11:37
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**93**	**(73 - 128)**	**SW846 8260B**
Benzene	**94**	**(81 - 119)**	**SW846 8260B**
Trichloroethene	**94**	**(78 - 121)**	**SW846 8260B**
Toluene	**93**	**(80 - 122)**	**SW846 8260B**
Chlorobenzene	**92**	**(82 - 119)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(60 - 128)
1,2-Dichloroethane-d4	75	(63 - 134)
Toluene-d8	78	(72 - 123)
Dibromofluoromethane	81	(70 - 130)

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 #...: E2H010352 **Work Order #...:** E54KX1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H080000-252
Prep Date.....: 08/07/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2220252 **Analysis Time..:** 11:37
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**50.0**	**46.4**	**ug/kg**	**93**	**SW846 8260B**
Benzene	**50.0**	**47.2**	**ug/kg**	**94**	**SW846 8260B**
Trichloroethene	**50.0**	**46.8**	**ug/kg**	**94**	**SW846 8260B**
Toluene	**50.0**	**46.6**	**ug/kg**	**93**	**SW846 8260B**
Chlorobenzene	**50.0**	**46.2**	**ug/kg**	**92**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(60 - 128)
1,2-Dichloroethane-d4	75	(63 - 134)
Toluene-d8	78	(72 - 123)
Dibromofluoromethane	81	(70 - 130)

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 #...: E2H010352 **Work Order #...:** E54L91AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H080000-270
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 17:35
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**99**	**(73 - 128)**	**SW846 8260B**
Benzene	**101**	**(81 - 119)**	**SW846 8260B**
Trichloroethene	**97**	**(78 - 121)**	**SW846 8260B**
Toluene	**98**	**(80 - 122)**	**SW846 8260B**
Chlorobenzene	**97**	**(82 - 119)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(60 - 128)
1,2-Dichloroethane-d4	92	(63 - 134)
Toluene-d8	99	(72 - 123)
Dibromofluoromethane	97	(70 - 130)

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 #...: E2H010352 **Work Order #...:** E54L91AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H080000-270
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 17:35
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**50.0**	**49.6**	**ug/kg**	**99**	**SW846 8260B**
Benzene	**50.0**	**50.4**	**ug/kg**	**101**	**SW846 8260B**
Trichloroethene	**50.0**	**48.5**	**ug/kg**	**97**	**SW846 8260B**
Toluene	**50.0**	**48.8**	**ug/kg**	**98**	**SW846 8260B**
Chlorobenzene	**50.0**	**48.3**	**ug/kg**	**97**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(60 - 128)
1,2-Dichloroethane-d4	92	(63 - 134)
Toluene-d8	99	(72 - 123)
Dibromofluoromethane	97	(70 - 130)

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 #...: E2H010352 **Work Order #...:** E6D491AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H130000-371
Prep Date.....: 08/06/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2225371 **Analysis Time..:** 17:33
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**89**	**(60 - 145)**	**SW846 8260B**
Benzene	**82**	**(60 - 135)**	**SW846 8260B**
Trichloroethene	**88**	**(60 - 140)**	**SW846 8260B**
Toluene	**91**	**(60 - 125)**	**SW846 8260B**
Chlorobenzene	**92**	**(60 - 125)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(60 - 140)
1,2-Dichloroethane-d4	104	(60 - 140)
Toluene-d8	106	(60 - 140)

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 #...: E2H010352 **Work Order #...:** E6D491AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H130000-371
Prep Date.....: 08/06/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2225371 **Analysis Time..:** 17:33
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	**2500**	**2230**	**ug/kg**	**89**	**SW846 8260B**
Benzene	**2500**	**2050**	**ug/kg**	**82**	**SW846 8260B**
Trichloroethene	**2500**	**2190**	**ug/kg**	**88**	**SW846 8260B**
Toluene	**2500**	**2270**	**ug/kg**	**91**	**SW846 8260B**
Chlorobenzene	**2500**	**2310**	**ug/kg**	**92**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	92	(60 - 140)
1,2-Dichloroethane-d4	104	(60 - 140)
Toluene-d8	106	(60 - 140)

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 Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5XCW1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H050000-325
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2217325 **Analysis Time..:** 16:12
Dilution Factor: 1 **Instrument ID..:** G13
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	**93**	**(70 - 140)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	117	(60 - 130)

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 Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5XCW1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H050000-325
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2217325 **Analysis Time..:** 16:12
Dilution Factor: 1 **Instrument ID..:** G13
Analyst ID.....: 001464

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Gasoline)	**5.00**	**4.63**	**mg/kg**	**93**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	117	(60 - 130)

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 Semivolatiles

Client Lot #...: E2H010352 **Work Order #...:** E5TF11AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H020000-273
Prep Date.....: 08/02/02 **Analysis Date..:** 08/05/02
Prep Batch #...: 2214273 **Analysis Time..:** 14:40
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	**81**	**(55 - 130)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	98	(60 - 130)

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 Semivolatiles

Client Lot #...: E2H010352 **Work Order #...:** E5TF11AC **Matrix.....:** SOLID
LCS Lot-Sample#: E2H020000-273
Prep Date.....: 08/02/02 **Analysis Date..:** 08/05/02
Prep Batch #...: 2214273 **Analysis Time..:** 14:40
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
TPH (as Diesel)	**250**	**202**	**mg/kg**	**81**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	98	(60 - 130)

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

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E2H020000-218 **Prep Batch #...:** 2214218					
Aluminum	97	(70 - 115)	SW846 6010B	08/02-08/05/02	E5R4E1AV
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Arsenic	103	(75 - 115)	SW846 6010B	08/02-08/05/02	E5R4E1AW
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Antimony	101	(75 - 115)	SW846 6010B	08/02-08/05/02	E5R4E1AX
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Barium	100	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A0
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Cadmium	99	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A1
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Chromium	103	(85 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A2
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Beryllium	109	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A3
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Lead	103	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A4
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Selenium	96	(70 - 115)	SW846 6010B	08/02-08/05/02	E5R4E1A5
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Silver	105	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A6
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	101	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A7
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Copper	103	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A8
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Molybdenum	103	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1A9
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Nickel	98	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1CA
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Thallium	102	(75 - 125)	SW846 6010B	08/02-08/05/02	E5R4E1CC
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Vanadium	103	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1CD
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			
Zinc	106	(80 - 120)	SW846 6010B	08/02-08/05/02	E5R4E1CE
		Dilution Factor: 1	Analysis Time..: 13:10	Analyst ID.....: 021088	
		Instrument ID..: M01			

LCS Lot-Sample#: E2H020000-226 **Prep Batch #...:** 2214226

Mercury	102	(85 - 115)	SW846 7471A	08/02/02	E5R4L1AC
		Dilution Factor: 1	Analysis Time..: 13:56	Analyst ID.....: 000023	
		Instrument ID..: M04			

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID

LCS Lot-Sample#: E2H020000-218 **Prep Batch #...:** 2214218

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	200	195	mg/kg	97	SW846 6010B	08/02-08/05/02	E5R4E1AV
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Arsenic	200	206	mg/kg	103	SW846 6010B	08/02-08/05/02	E5R4E1AW
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Antimony	50.0	50.6	mg/kg	101	SW846 6010B	08/02-08/05/02	E5R4E1AX
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Barium	200	200	mg/kg	100	SW846 6010B	08/02-08/05/02	E5R4E1A0
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Cadmium	5.00	4.94	mg/kg	99	SW846 6010B	08/02-08/05/02	E5R4E1A1
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Chromium	20.0	20.5	mg/kg	103	SW846 6010B	08/02-08/05/02	E5R4E1A2
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Beryllium	5.00	5.44	mg/kg	109	SW846 6010B	08/02-08/05/02	E5R4E1A3
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Lead	50.0	51.3	mg/kg	103	SW846 6010B	08/02-08/05/02	E5R4E1A4
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Selenium	200	192	mg/kg	96	SW846 6010B	08/02-08/05/02	E5R4E1A5
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Silver	5.00	5.27	mg/kg	105	SW846 6010B	08/02-08/05/02	E5R4E1A6
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	50.7	mg/kg	101	SW846 6010B	08/02-08/05/02	E5R4E1A7
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Copper	25.0	25.7	mg/kg	103	SW846 6010B	08/02-08/05/02	E5R4E1A8
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Molybdenum	100	103	mg/kg	103	SW846 6010B	08/02-08/05/02	E5R4E1A9
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Nickel	50.0	49.2	mg/kg	98	SW846 6010B	08/02-08/05/02	E5R4E1CA
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Thallium	200	204	mg/kg	102	SW846 6010B	08/02-08/05/02	E5R4E1CC
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Vanadium	50.0	51.6	mg/kg	103	SW846 6010B	08/02-08/05/02	E5R4E1CD
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				
Zinc	50.0	52.9	mg/kg	106	SW846 6010B	08/02-08/05/02	E5R4E1CE
			Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 021088	
			Instrument ID..: M01				

LCS Lot-Sample#: E2H020000-226 **Prep Batch #...:** 2214226

Mercury	0.833	0.849	mg/kg	102	SW846 7471A	08/02/02	E5R4L1AC
			Dilution Factor: 1		Analysis Time..: 13:56	Analyst ID.....: 000023	
			Instrument ID..: M04				

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E2H010352	**Work Order #...:**	E5RGN1AC-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E2H010352-007		E5RGN1AD-MSD		
Date Sampled...:	08/01/02 10:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2220089
Prep Date.....:	08/07/02	**Analysis Date..:**	08/07/02		
Prep Batch #...:	2220252	**Analysis Time..:**	14:30		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**84**	**(65 - 150)**			**SW846 8260B**
	83	**(65 - 150)**	**1.7**	**(0-30)**	**SW846 8260B**
Benzene	**92**	**(70 - 130)**			**SW846 8260B**
	90	**(70 - 130)**	**2.9**	**(0-30)**	**SW846 8260B**
Trichloroethene	**84**	**(70 - 135)**			**SW846 8260B**
	86	**(70 - 135)**	**2.4**	**(0-30)**	**SW846 8260B**
Toluene	**87**	**(70 - 130)**			**SW846 8260B**
	90	**(70 - 130)**	**3.6**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**89**	**(70 - 130)**			**SW846 8260B**
	90	**(70 - 130)**	**0.98**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(65 - 135)
	96	(65 - 135)
1,2-Dichloroethane-d4	68	(60 - 140)
	69	(60 - 140)
Toluene-d8	73	(70 - 130)
	74	(70 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5RGN1AC-MS **Matrix.....:** SOLID
MS Lot-Sample #: E2H010352-007 E5RGN1AD-MSD
Date Sampled...: 08/01/02 10:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220089
Prep Date.....: 08/07/02 **Analysis Date..:** 08/07/02
Prep Batch #...: 2220252 **Analysis Time..:** 14:30
Dilution Factor: 1 **Analyst ID.....:** 999998 **Instrument ID..:** MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**50.0**	**42.0**	**ug/kg**	**84**		**SW846 8260B**
	ND	**50.0**	**41.3**	**ug/kg**	**83**	**1.7**	**SW846 8260B**
Benzene	**ND**	**50.0**	**46.2**	**ug/kg**	**92**		**SW846 8260B**
	ND	**50.0**	**44.9**	**ug/kg**	**90**	**2.9**	**SW846 8260B**
Trichloroethene	**ND**	**50.0**	**41.8**	**ug/kg**	**84**		**SW846 8260B**
	ND	**50.0**	**42.9**	**ug/kg**	**86**	**2.4**	**SW846 8260B**
Toluene	**ND**	**50.0**	**43.4**	**ug/kg**	**87**		**SW846 8260B**
	ND	**50.0**	**45.1**	**ug/kg**	**90**	**3.6**	**SW846 8260B**
Chlorobenzene	**ND**	**50.0**	**44.3**	**ug/kg**	**89**		**SW846 8260B**
	ND	**50.0**	**44.8**	**ug/kg**	**90**	**0.98**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	100	(65 - 135)
	96	(65 - 135)
1,2-Dichloroethane-d4	68	(60 - 140)
	69	(60 - 140)
Toluene-d8	73	(70 - 130)
	74	(70 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E2H010352	**Work Order #...:**	E5RFP1AC-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E2H010352-001		E5RFP1AD-MSD		
Date Sampled...:	08/01/02 09:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2220107
Prep Date.....:	08/02/02	**Analysis Date..:**	08/02/02		
Prep Batch #...:	2220270	**Analysis Time..:**	20:32		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**97**	**(65 - 150)**			**SW846 8260B**
	94	**(65 - 150)**	**3.6**	**(0-30)**	**SW846 8260B**
Benzene	**99**	**(70 - 130)**			**SW846 8260B**
	99	**(70 - 130)**	**0.14**	**(0-30)**	**SW846 8260B**
Trichloroethene	**98**	**(70 - 135)**			**SW846 8260B**
	102	**(70 - 135)**	**3.9**	**(0-30)**	**SW846 8260B**
Toluene	**93**	**(70 - 130)**			**SW846 8260B**
	95	**(70 - 130)**	**2.2**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**93**	**(70 - 130)**			**SW846 8260B**
	94	**(70 - 130)**	**0.47**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(65 - 135)
	95	(65 - 135)
1,2-Dichloroethane-d4	96	(60 - 140)
	97	(60 - 140)
Toluene-d8	98	(70 - 130)
	100	(70 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5RFP1AC-MS **Matrix.....:** SOLID
MS Lot-Sample #: E2H010352-001 E5RFP1AD-MSD
Date Sampled...: 08/01/02 09:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2220107
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2220270 **Analysis Time..:** 20:32
Dilution Factor: 1 **Analyst ID.....:** 999998 **Instrument ID..:** MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**50.0**	**48.5**	**ug/kg**	**97**		**SW846 8260B**
	ND	**50.0**	**46.8**	**ug/kg**	**94**	**3.6**	**SW846 8260B**
Benzene	**ND**	**50.0**	**49.7**	**ug/kg**	**99**		**SW846 8260B**
	ND	**50.0**	**49.6**	**ug/kg**	**99**	**0.14**	**SW846 8260B**
Trichloroethene	**ND**	**50.0**	**49.1**	**ug/kg**	**98**		**SW846 8260B**
	ND	**50.0**	**51.0**	**ug/kg**	**102**	**3.9**	**SW846 8260B**
Toluene	**ND**	**50.0**	**46.5**	**ug/kg**	**93**		**SW846 8260B**
	ND	**50.0**	**47.6**	**ug/kg**	**95**	**2.2**	**SW846 8260B**
Chlorobenzene	**ND**	**50.0**	**46.6**	**ug/kg**	**93**		**SW846 8260B**
	ND	**50.0**	**46.8**	**ug/kg**	**94**	**0.47**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	98	(65 - 135)
	95	(65 - 135)
1,2-Dichloroethane-d4	96	(60 - 140)
	97	(60 - 140)
Toluene-d8	98	(70 - 130)
	100	(70 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E2H010352	**Work Order #...:**	E5VVV1AL-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E2H020314-001		E5VVV1AM-MSD		
Date Sampled...:	07/30/02 10:25	**Date Received..:**	08/02/02 16:15	**MS Run #.....:**	2218096
Prep Date.....:	08/05/02	**Analysis Date..:**	08/05/02		
Prep Batch #...:	2218248	**Analysis Time..:**	22:53		
Dilution Factor:	1	**Analyst ID.....:**	999998	**Instrument ID..:**	MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**92**	**(65 - 150)**			**SW846 8260B**
	97	**(65 - 150)**	**5.1**	**(0-30)**	**SW846 8260B**
Benzene	**91**	**(70 - 130)**			**SW846 8260B**
	95	**(70 - 130)**	**4.4**	**(0-30)**	**SW846 8260B**
Trichloroethene	**142 a,MSC**	**(70 - 135)**			**SW846 8260B**
	146 a,MSC	**(70 - 135)**	**2.5**	**(0-30)**	**SW846 8260B**
Toluene	**87**	**(70 - 130)**			**SW846 8260B**
	86	**(70 - 130)**	**1.7**	**(0-30)**	**SW846 8260B**
Chlorobenzene	**89**	**(70 - 130)**			**SW846 8260B**
	87	**(70 - 130)**	**1.6**	**(0-30)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	88	(65 - 135)
	95	(65 - 135)
1,2-Dichloroethane-d4	110	(60 - 140)
	117	(60 - 140)
Toluene-d8	92	(70 - 130)
	97	(70 - 130)

NOTE(S):

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

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5VVV1AL-MS **Matrix.....:** SOLID
MS Lot-Sample #: E2H020314-001 E5VVV1AM-MSD
Date Sampled...: 07/30/02 10:25 **Date Received..:** 08/02/02 16:15 **MS Run #.....:** 2218096
Prep Date.....: 08/05/02 **Analysis Date..:** 08/05/02
Prep Batch #...: 2218248 **Analysis Time..:** 22:53
Dilution Factor: 1 **Analyst ID.....:** 999998 **Instrument ID..:** MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**56.6**	**52.2**	**ug/kg**	**92**		**SW846 8260B**
	ND	**56.6**	**55.0**	**ug/kg**	**97**	**5.1**	**SW846 8260B**
Benzene	**ND**	**56.6**	**51.6**	**ug/kg**	**91**		**SW846 8260B**
	ND	**56.6**	**53.9**	**ug/kg**	**95**	**4.4**	**SW846 8260B**
Trichloroethene	**ND**	**56.6**	**80.4**	**ug/kg**	**142**		**SW846 8260B**
	Qualifiers:		a,MSC				
	ND	**56.6**	**82.4**	**ug/kg**	**146**	**2.5**	**SW846 8260B**
	Qualifiers:		a,MSC				
Toluene	**ND**	**56.6**	**49.5**	**ug/kg**	**87**		**SW846 8260B**
	ND	**56.6**	**48.7**	**ug/kg**	**86**	**1.7**	**SW846 8260B**
Chlorobenzene	**ND**	**56.6**	**50.3**	**ug/kg**	**89**		**SW846 8260B**
	ND	**56.6**	**49.5**	**ug/kg**	**87**	**1.6**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	88	(65 - 135)
	95	(65 - 135)
1,2-Dichloroethane-d4	110	(60 - 140)
	117	(60 - 140)
Toluene-d8	92	(70 - 130)
	97	(70 - 130)

NOTE(S):

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

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5VV61AJ-MS **Matrix.....:** SOLID
MS Lot-Sample #: E2H020314-006 E5VV61AK-MSD
Date Sampled...: 08/01/02 11:10 **Date Received..:** 08/02/02 16:15 **MS Run #.....:** 2225151
Prep Date.....: 08/06/02 **Analysis Date..:** 08/08/02
Prep Batch #...: 2225371 **Analysis Time..:** 01:57
Dilution Factor: 5 **Analyst ID.....:** 999998 **Instrument ID..:** MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**85**	**(60 - 145)**			**SW846 8260B**
	81	**(60 - 145)**	**5.7**	**(0-35)**	**SW846 8260B**
Benzene	**97**	**(60 - 135)**			**SW846 8260B**
	96	**(60 - 135)**	**0.10**	**(0-35)**	**SW846 8260B**
Trichloroethene	**90**	**(60 - 140)**			**SW846 8260B**
	83	**(60 - 140)**	**7.9**	**(0-35)**	**SW846 8260B**
Toluene	**0.0**	**(60 - 125)**			**SW846 8260B**
	Qualifiers: NC,MSB,MSC				
	0.0	**(60 - 125)**	**0.0**	**(0-35)**	**SW846 8260B**
	Qualifiers: NC,MSB,MSC				
Chlorobenzene	**123**	**(60 - 125)**			**SW846 8260B**
	115	**(60 - 125)**	**6.8**	**(0-35)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	153 *	(60 - 140)
	150 *	(60 - 140)
1,2-Dichloroethane-d4	230 *	(60 - 140)
	179 *	(60 - 140)
Toluene-d8	179 *	(60 - 140)
	179 *	(60 - 140)

NOTE(S):

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

Bold print denotes control parameters

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5VV61AJ-MS **Matrix.....:** SOLID
MS Lot-Sample #: E2H020314-006 E5VV61AK-MSD
Date Sampled...: 08/01/02 11:10 **Date Received..:** 08/02/02 16:15 **MS Run #.....:** 2225151
Prep Date.....: 08/06/02 **Analysis Date..:** 08/08/02
Prep Batch #...: 2225371 **Analysis Time..:** 01:57
Dilution Factor: 5 **Analyst ID.....:** 999998 **Instrument ID..:** MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**2740**	**2340**	**ug/kg**	**85**		**SW846 8260B**
	ND	**2740**	**2210**	**ug/kg**	**81**	**5.7**	**SW846 8260B**
Benzene	**3500**	**2740**	**6190**	**ug/kg**	**97**		**SW846 8260B**
	3500	**2740**	**6180**	**ug/kg**	**96**	**0.10**	**SW846 8260B**
Trichloroethene	**ND**	**2740**	**2470**	**ug/kg**	**90**		**SW846 8260B**
	ND	**2740**	**2280**	**ug/kg**	**83**	**7.9**	**SW846 8260B**
Toluene	**24000**	**2740**		**ug/kg**	**0.0**		**SW846 8260B**
	Qualifiers: NC,MSB,MSC						
	24000	**2740**		**ug/kg**	**0.0**	**0.0**	**SW846 8260B**
	Qualifiers: NC,MSB,MSC						
Chlorobenzene	**ND**	**2740**	**3370**	**ug/kg**	**123**		**SW846 8260B**
	ND	**2740**	**3150**	**ug/kg**	**115**	**6.8**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	153 *	(60 - 140)
	150 *	(60 - 140)
1,2-Dichloroethane-d4	230 *	(60 - 140)
	179 *	(60 - 140)
Toluene-d8	179 *	(60 - 140)
	179 *	(60 - 140)

NOTE(S):

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

Bold print denotes control parameters

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E2H010352	**Work Order #...:**	E5RHJ1A1-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E2H010352-017		E5RHJ1A2-MSD		
Date Sampled...:	08/01/02 13:00	**Date Received..:**	08/01/02 16:20	**MS Run #.....:**	2217161
Prep Date.....:	08/02/02	**Analysis Date..:**	08/02/02		
Prep Batch #...:	2217325	**Analysis Time..:**	17:36		
Dilution Factor:	1	**Analyst ID.....:**	001464	**Instrument ID..:**	G13

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**90**	**(70 - 140)**			**SW846 8015B**
	85	**(70 - 140)**	**6.4**	**(0-40)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	118	(60 - 130)
	116	(60 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E2H010352 **Work Order #...:** E5RHJ1A1-MS **Matrix.....:** SOLID
MS Lot-Sample #: E2H010352-017 E5RHJ1A2-MSD
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20 **MS Run #.....:** 2217161
Prep Date.....: 08/02/02 **Analysis Date..:** 08/02/02
Prep Batch #...: 2217325 **Analysis Time..:** 17:36
Dilution Factor: 1 **Analyst ID.....:** 001464 **Instrument ID..:** G13

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Gasoline)	**ND**	**5.00**	**4.51**	**mg/kg**	**90**		**SW846 8015B**
	ND	**5.00**	**4.23**	**mg/kg**	**85**	**6.4**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
a,a,a-Trifluorotoluene (TFT)	118	(60 - 130)
	116	(60 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...:	E2H010352	**Work Order #...:**	E5Q5P1AF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E2H010311-001		E5Q5P1AG-MSD		
Date Sampled...:	08/01/02	**Date Received..:**	08/01/02 12:00	**MS Run #.....:**	2214105
Prep Date.....:	08/02/02	**Analysis Date..:**	08/05/02		
Prep Batch #...:	2214273	**Analysis Time..:**	15:57		
Dilution Factor:	1	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Diesel)	**76**	**(55 - 130)**			**SW846 8015B**
	74	**(55 - 130)**	**2.0**	**(0-35)**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	88	(60 - 130)
	90	(60 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...:	E2H010352	**Work Order #...:**	E5Q5P1AF-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	E2H010311-001		E5Q5P1AG-MSD		
Date Sampled...:	08/01/02	**Date Received..:**	08/01/02 12:00	**MS Run #.....:**	2214105
Prep Date.....:	08/02/02	**Analysis Date..:**	08/05/02		
Prep Batch #...:	2214273	**Analysis Time..:**	15:57		
Dilution Factor:	1	**Analyst ID.....:**	356074	**Instrument ID..:**	G02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
TPH (as Diesel)	**22**	**250**	**211**	**mg/kg**	**76**		**SW846 8015B**
	22	**250**	**207**	**mg/kg**	**74**	**2.0**	**SW846 8015B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Benzo(a)pyrene	88	(60 - 130)
	90	(60 - 130)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2H010352-016 **Prep Batch #...:** 2214218							
Aluminum	NC	(70 - 115)			SW846 6010B	08/02-08/05/02	E5RHE1A1
	NC	(70 - 115)		(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1A2
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Arsenic	96	(75 - 115)			SW846 6010B	08/02-08/05/02	E5RHE1A3
	99	(75 - 115)	2.9	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1A4
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Antimony	21 N	(75 - 115)			SW846 6010B	08/02-08/05/02	E5RHE1A5
	22 N	(75 - 115)	6.3	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1A6
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Barium	83	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1A7
	100	(80 - 120)	11	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1A8
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Cadmium	74 N	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1A9
	78 N	(80 - 120)	4.6	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CA
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Chromium	92	(85 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CC
	108	(85 - 120)	6.7	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CD
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Beryllium	99	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CE
	104	(80 - 120)	4.6	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CF
		Dilution Factor: 1					
		Analysis Time..: 14:04	Instrument ID..: M01			Analyst ID.....: 021088	
		MS Run #.....: 2214071					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	92	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CG
	97	(80 - 120)	4.4	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CH
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Selenium	91	(70 - 115)			SW846 6010B	08/02-08/05/02	E5RHE1CJ
	94	(70 - 115)	3.4	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CK
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Silver	94	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CL
	99	(80 - 120)	4.6	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CM
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Cobalt	91	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CN
	97	(80 - 120)	5.4	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CP
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Copper	91	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CQ
	110	(80 - 120)	8.9	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CR
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Molybdenum	89	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CT
	93	(80 - 120)	4.2	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CU
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					
Nickel	87	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1CV
	94	(80 - 120)	5.8	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1CW
		Dilution Factor: 1					
		Analysis Time..: 14:04			Instrument ID..: M01	Analyst ID.....: 021088	
		MS Run #.....: 2214071					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium	94	(75 - 125)			SW846 6010B	08/02-08/05/02	E5RHE1CX
	98	(75 - 125)	4.2	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1C0

Dilution Factor: 1
Analysis Time..: 14:04 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2214071

Vanadium	90	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1C1
	109	(80 - 120)	9.8	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1C2

Dilution Factor: 1
Analysis Time..: 14:04 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2214071

Zinc	86	(80 - 120)			SW846 6010B	08/02-08/05/02	E5RHE1C3
	106	(80 - 120)	8.8	(0-25)	SW846 6010B	08/02-08/05/02	E5RHE1C4

Dilution Factor: 1
Analysis Time..: 14:04 Instrument ID..: M01 Analyst ID.....: 021088
MS Run #.....: 2214071

MS Lot-Sample #: E2H010352-016 **Prep Batch #...:** 2214226

Mercury	122 N	(80 - 120)			SW846 7471A	08/02/02	E5RHE1C5
	129 N	(80 - 120)	5.1	(0-20)	SW846 7471A	08/02/02	E5RHE1C6

Dilution Factor: 1
Analysis Time..: 14:01 Instrument ID..: M04 Analyst ID.....: 000023
MS Run #.....: 2214073

NOTE(S):

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

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E2H010352-016 **Prep Batch #...:** 2214218									
Aluminum									
	20600	200	19700	mg/kg			SW846 6010B	08/02-08/05/02	E5RHE1A1
			Qualifiers: NC						
	20600	200	23200	mg/kg			SW846 6010B	08/02-08/05/02	E5RHE1A2
			Qualifiers: NC						
			Dilution Factor: 1						
			Analysis Time..: 14:04	Instrument ID..: M01				Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Arsenic									
	6.0	200	199	mg/kg	96		SW846 6010B	08/02-08/05/02	E5RHE1A3
	6.0	200	204	mg/kg	99	2.9	SW846 6010B	08/02-08/05/02	E5RHE1A4
			Dilution Factor: 1						
			Analysis Time..: 14:04	Instrument ID..: M01				Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Antimony									
	ND	50.0	10.4 N	mg/kg	21		SW846 6010B	08/02-08/05/02	E5RHE1A5
	ND	50.0	11.1 N	mg/kg	22	6.3	SW846 6010B	08/02-08/05/02	E5RHE1A6
			Dilution Factor: 1						
			Analysis Time..: 14:04	Instrument ID..: M01				Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Barium									
	125	200	290	mg/kg	83		SW846 6010B	08/02-08/05/02	E5RHE1A7
	125	200	326	mg/kg	100	11	SW846 6010B	08/02-08/05/02	E5RHE1A8
			Dilution Factor: 1						
			Analysis Time..: 14:04	Instrument ID..: M01				Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Cadmium									
	ND	5.00	3.70 N	mg/kg	74		SW846 6010B	08/02-08/05/02	E5RHE1A9
	ND	5.00	3.88 N	mg/kg	78	4.6	SW846 6010B	08/02-08/05/02	E5RHE1CA
			Dilution Factor: 1						
			Analysis Time..: 14:04	Instrument ID..: M01				Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Chromium									
	28.0	20.0	46.4	mg/kg	92		SW846 6010B	08/02-08/05/02	E5RHE1CC
	28.0	20.0	49.6	mg/kg	108	6.7	SW846 6010B	08/02-08/05/02	E5RHE1CD
			Dilution Factor: 1						
			Analysis Time..: 14:04	Instrument ID..: M01				Analyst ID.....: 021088	
			MS Run #.....: 2214071						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium									
	0.61	5.00	5.56	mg/kg	99		SW846 6010B	08/02-08/05/02	E5RHE1CE
	0.61	5.00	5.82	mg/kg	104	4.6	SW846 6010B	08/02-08/05/02	E5RHE1CF
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Lead									
	5.7	50.0	51.8	mg/kg	92		SW846 6010B	08/02-08/05/02	E5RHE1CG
	5.7	50.0	54.1	mg/kg	97	4.4	SW846 6010B	08/02-08/05/02	E5RHE1CH
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Selenium									
	0.56	200	182	mg/kg	91		SW846 6010B	08/02-08/05/02	E5RHE1CJ
	0.56	200	188	mg/kg	94	3.4	SW846 6010B	08/02-08/05/02	E5RHE1CK
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Silver									
	ND	5.00	4.71	mg/kg	94		SW846 6010B	08/02-08/05/02	E5RHE1CL
	ND	5.00	4.93	mg/kg	99	4.6	SW846 6010B	08/02-08/05/02	E5RHE1CM
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Cobalt									
	10.2	50.0	55.5	mg/kg	91		SW846 6010B	08/02-08/05/02	E5RHE1CN
	10.2	50.0	58.5	mg/kg	97	5.4	SW846 6010B	08/02-08/05/02	E5RHE1CP
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Copper									
	26.3	25.0	49.1	mg/kg	91		SW846 6010B	08/02-08/05/02	E5RHE1CQ
	26.3	25.0	53.7	mg/kg	110	8.9	SW846 6010B	08/02-08/05/02	E5RHE1CR
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E2H010352 **Matrix.....:** SOLID
Date Sampled...: 08/01/02 13:00 **Date Received..:** 08/01/02 16:20

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum									
	1.1	100	90.0	mg/kg	89		SW846 6010B	08/02-08/05/02	E5RHE1CT
	1.1	100	93.8	mg/kg	93	4.2	SW846 6010B	08/02-08/05/02	E5RHE1CU
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Nickel									
	18.3	50.0	61.6	mg/kg	87		SW846 6010B	08/02-08/05/02	E5RHE1CV
	18.3	50.0	65.2	mg/kg	94	5.8	SW846 6010B	08/02-08/05/02	E5RHE1CW
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Thallium									
	ND	200	189	mg/kg	94		SW846 6010B	08/02-08/05/02	E5RHE1CX
	ND	200	197	mg/kg	98	4.2	SW846 6010B	08/02-08/05/02	E5RHE1C0
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Vanadium									
	51.2	50.0	95.9	mg/kg	90		SW846 6010B	08/02-08/05/02	E5RHE1C1
	51.2	50.0	106	mg/kg	109	9.8	SW846 6010B	08/02-08/05/02	E5RHE1C2
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						
Zinc									
	66.5	50.0	110	mg/kg	86		SW846 6010B	08/02-08/05/02	E5RHE1C3
	66.5	50.0	120	mg/kg	106	8.8	SW846 6010B	08/02-08/05/02	E5RHE1C4
			Dilution Factor: 1						
			Analysis Time..: 14:04		Instrument ID..: M01			Analyst ID.....: 021088	
			MS Run #.....: 2214071						

MS Lot-Sample #: E2H010352-016 **Prep Batch #...:** 2214226

Mercury									
	0.020	0.167	0.223 N	mg/kg	122		SW846 7471A	08/02/02	E5RHE1C5
	0.020	0.167	0.235 N	mg/kg	129	5.1	SW846 7471A	08/02/02	E5RHE1C6
			Dilution Factor: 1						
			Analysis Time..: 14:01		Instrument ID..: M04			Analyst ID.....: 000023	
			MS Run #.....: 2214073						

NOTE(S):

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

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.